

REPORT AND GAZETTEER

OF

BURMA,

NATIVE AND BRITISH,

IN THREE PARTS.

Prepared in the Intelligence Branch of the Quarter Master General's
Department in India

BY

MAJOR DOUGLAS MACNEILL,

M I GENL LIST, ATTACHÉ, INTEL BRANCH, Q. M. G.'S DEPT IN INDIA.

PART I.



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PREFACE.

THIS work is divided into three parts. The first refers to Upper or Native Burma. The second to Lower or British Burma. The third contains Appendices.

I have found it impossible in describing the two countries to keep them entirely separate. Thus, in the chapters on Geography and History, I found it necessary to give a general account of both countries as one. Wherever it was possible I have, however, kept them separate.

The geography of Upper Burma is compiled from the writings of various travellers. Few of these are of recent date, and little is known of the greater part of the country.

The Irrawaddy and a few places along its banks are now well known, as there is a constant traffic up and down carried on by the Flotilla Company's steamers.

There are no surveys of the country, and the positions of very few places are accurately fixed.

My own travels in Upper Burma were unfortunately limited to the Irrawaddy, and, as I travelled by steamer, I could only examine the places where she called.

I have given a minute description of the banks of the Irrawaddy as far as they could be seen from the steamer, also of the city of Mandalay and its environs.

The maps which accompany this Report have, for the sake of convenience, been bound separately.

In constructing the map of Mandalay and the adjacent country, I have trusted almost entirely to my own notes and observations made on the spot. Any part which I have not personally examined myself is shown in dotted lines, but I have ridden or walked over almost the whole of the town and country mapped.

The distances were fixed by pacing and time calculations. It was impossible in any case to make a measurement. Notwithstanding this, I believe they will be found to be very nearly correct.

The map of the Irrawaddy river was first enlarged from the Surveyor General's map, and then altered according to notes and observations made by me while ascending and descending the river. The intention of this map is to supply a large scale map of the river showing the nature of the banks, the places selected by me as advantageous posts or good camping grounds, and

places where opposition might be expected to an advancing force And also to supply to future explorers a handy map on which to make their notes

The Map* of Upper and Lower Burma has been prepared with great care, and all the latest authorities have been consulted in its compilation The object kept in view has been rather to give a truthful map of the country, leaving bare the parts unknown, than to fill it up with doubtful detail, gathered from native reports and maps The other maps speak for themselves

The roads in Upper Burma are for the most part tracks passing from one village to another, sometimes over rough hilly ground, at others through paddy-fields No attempt is ever made to improve them by metalling, and the rivers and streams which cut across them are seldom bridged In the hilly country no attempt appears to be made to avoid abrupt gradients, on the contrary, Dr Anderson remarks, referring to the road between Blamo and Momien, that the chief object of whoever laid it out appears to have been to reach the top of all the highest mountains that lay at all in its direction

Bridges for carts are seldom met with, and carts have to cross the rivers as best they may Occasionally bridges for pedestrians are to be found, but as they are frequently swept away in the rains, their presence is not to be relied on

The Burmese bridge when new is a handsome and useful structure, generally erected by some who wishes to invest his superfluous cash in the performance of a "good deed" that will benefit him in a future state It is built of the best and most durable materials, because when the bridge ceases to be useful to mankind, the donor and constructor of it ceases to receive any spiritual benefit therefrom While this belief is a great incentive amongst the Burmans to the erecting of bridges, pagodas, zayats and kyongs, &c, it is also fatal to all hope of their being repaired, inasmuch as the repair of a work constructed by another does not go to the benefit of the repairer but the constructor It therefore happens that as everyone is more anxious about his own soul than that of his neighbour, repairs are never attended to, and a man will rather construct an entirely new bridge on his own account than add a nail or plank to one constructed by a friend Thus when a bridge commences to decay its decline is rapid

There are few towns in Burma which a European would call permanent They are mostly composed of wood and are subject to frequent fires, which periodically destroy the greater part of them

The Royal City itself is deserted or occupied at the caprice of the king

The following books have been consulted in preparing this Report and Gazetteer —

List of books referring to Burma

- 1 Yule's Mission to Ava, 1855
 - 2 Description of the Burma Empire (San Germano).
 - 3 Mandalay to Momiien (Anderson)
 - 4 Through Burma to Western China (C Williams)
 - 5 Burma, Past and Present (Fytche)
 - 6 Land of the White Elephant (Vincent)
 - 7 Burma Wars (Laurie)
 - 8 First Burman War (Snodgrass)
 - 9 Horse Guards Précis
 - 10 Geology of India (Medheott and Blanford)
 - 11 Hill Tracts between Assam and Burma
 - 12 Report on the Irrawaddy River (Gordon)
 - 13 British Burma (Forbes)
 - 14 Crawford's Mission to Ava
 - 15 British Burma Gazetteer and Official Papers,
and other works and papers
-

INTRODUCTION.

TRANSLITERATION OF BURMESE WORDS INTO ENGLISH

To assist the reader to pronounce the Burmese words which occur in the following pages, I give here an extract from the Proceedings of the Chief Commissioner, British Burma, dated 27th June 1881, on the transliteration* of Burmese words into English —

“The question of the transliteration of Burmese words into English has more or less occupied the attention of the local Government since the year 1872. Before that time there does not appear to have been any attempt to settle, by official authority, the manner in which Burmese words in official documents should be represented in English letters.

“The first efforts which were made by the local Government to introduce some systematic plan of transliteration were called forth by the instructions of the Government of India for the preparation of provincial Gazetteers, with a view to their ultimate combination into an Imperial Statistical Account of India.

“The Government of India circulated copies of a ‘Guide to the Orthography of Indian Proper Names,’ prepared by Dr W W Hunter, but, after consulting officers of experience and knowledge of the language, it was found that, so far as Burma was concerned, the rules were unsuitable and could not be accepted, and the Chief Commissioner represented this to the Government of India.

“The Government of India concurred in thinking that Dr Hunter’s ‘Guide to the Orthography of Indian Proper Names’ must be discarded in settling the spelling of names of towns and villages in British Burma, and in notifying the final approval and confirmation by Her Majesty’s Government of the system of transliteration prescribed for adoption, and in directing that it should be adhered to and carried into effect, the Government of India specially excepted this province.”

In 1877 a Committee was appointed to draw up a scheme of transliteration, which was submitted to the Government of India.

In their reply the Government of India pointed out various defects, and took occasion to explain that “the object in view is to follow such a system of transliteration that the reader, by attending to the rules according to which the sounds are expressed, may be enabled to pronounce the words with as much accuracy as may be attainable by one not possessing any special acquaintance with the language. What the Government desire is a phonetic spelling, that is, such a spelling based upon a uniform rendering of sound by sound (not letter by letter) that, wherever a given sound occurs, there may be no doubt in the mind of one acquainted with the value assigned to the combination of letters representing that sound regarding the manner in “which it should be uttered.”

* I have adhered to these rules as far as it was possible for one unacquainted with the language to do, and, although I have been assisted by a Burman clerk, whom I imported for the purpose, I fear that, owing to his not altogether perfect knowledge of the English tongue, many errors will be found.

Under the orders of the Chief Commissioner fresh endeavours were then made to devise a suitable system of rendering Burmese names in English characters. After an unsuccessful attempt to accomplish this object with the aid of diacritical marks, a plan was developed and experimentally put in practice. The results were generally satisfactory, and in June 1880 the new scheme was submitted for the approval of the Government of India. The Government of India were favourably disposed towards the proposed settlement of the question, but, before coming to a decision, caused certain suggestions, with which they had been favoured by Mr Brandis, Inspector General of Forests to the Government of India, to be forwarded for the Chief Commissioner's consideration. These suggestions were laid before a special Committee, which approved, with some slight modifications, of the system as originally presented, and their report, with some further remarks and suggestions from the Chief Commissioner, was submitted to the Government of India.

The Governor General in Council was now pleased to give a general approval of the scheme of transliteration put forward by Sir Charles Aitchison in the letter of June 1880, and to leave the final settlement of the question to him.

Accordingly, the system of June 1880, with the modifications of the last Committee, has been adopted without further alteration.

The system now introduced for the transliteration of all Burmese names and other words occurring in official papers is explained in the appended tables. The following observations are made on its most important features.

The term transliteration is strictly accurate in part, but is not quite correct as applied to the system all through. The defects of the Burmese alphabet and the peculiarities of the English language make it impossible in every case to render letter for letter. The Burmese alphabet belongs to a language of a totally different character and genus, and in many respects is ill-fitted to convey Burmese sounds, and this difficulty has been increased by the unskilful manner in which the adaptation of an alphabet, which might have been used to much greater advantage, has been effected.

The consequence is that the sound in Burmese assigned to a particular letter frequently bears little resemblance to the sound which that letter originally represented, and that the powers of letters vary greatly in different positions and combinations. It is therefore out of the question to attempt, in all instances, to make the same letter in English stand for a given letter in Burmese. When the same symbol may be in one place employed to convey the sound of 'r,' in another the sound of 'y,' and in a third that of 'sh,' it is obviously needless, for practical purposes, to lay down a single corresponding character in English.

Under these circumstances the object of the present scheme is to convey the sound represented by Burmese letters or combinations of letters by equivalent English letters or combinations of letters. Where one letter answers this purpose, one letter is used, where more letters than one are needed, more are employed. As the words in their English dress are to be used in English documents by Englishmen, many of whom have no acquaintance with the Burmese language, the endeavour has been, as far as practicable, to give to each letter and each combination of letters precisely the same force as if the word were an English word. Unfortunately the pronunciation of one word in English is not always a guide to the correct pronunciation of another word similarly spelt. But in the present scheme as much as possible only those combinations are used which are pronounced in one way only, or at least those the pronunciation of which is least doubtful.

If the words, therefore, as they appear written in English are read and pronounced as English words, the sound produced will, it is intended, be as like the sound in Burmese as it is possible to make it without a knowledge of that language

In working out the scheme the points aimed at throughout have been simplicity and practical utility

Accordingly distinctions which it is difficult for an English ear to appreciate have been abandoned. Thus, the long and short vowels are each represented by a single sign. Aspirated and unaspirated letters are not distinguished. The 't' and 'd' in 'ts' and 'dz,' &c, are omitted as useless. Cerebrals and dentals have the same symbols in English. The sounds produced by the combinations of the vowels with the only consonants which are ever found as final consonants are rendered by separate combinations of English letters

TABLES FOR THE transliteration OF BURMESE INTO ENGLISH.

The first table shows the powers of the vowels when not followed by a final sonant consonant, the second the force of the consonants when not used as sonant finals, third, the sounds produced by the combination of the vowels with the final sonant consonants

TABLE I

Table of vowels when not followed by a final sonant consonant

Burmese character	English equivalent	Examples	Remarks
အ, အာ, ဘ, ဘိ	a	အာ ana, အာ ana	The same symbols are used to express the long and short sounds of the first three vowels. Excluding short 'a,' the short vowels in Burmese, except in conjunction with a final sonant consonant, occur very seldom in comparison with the corresponding long vowels
ဧ, ဧိ, ဝ, ဝိ	ee	ဧိ.ဧိ.မီး mee	
ဥ, ဥိ, ဝိ	oo	ဥထု oo-doo, ဥိထု oo too	
ဧ, ဧိ	ay	ဧေ, ဧေ, ဧေ may	This symbol has been chosen as that least likely to lead to misapprehension. The sound is like that of the first 'e,' in "vegetate."
ဧ, ဧိ	eh	ဧ, ဧ, peh	
ပ, ပိ, ပိ, ပိ	aw	ပေ, ပေ, ပေ, paw	The remarks regarding the first three vowels apply.
န, ဝိ	o	န, ဝိ, ဝိ, no	No attempt has been made to represent the tones which in Burmese are indicated by leaving a final vowel or nasal unmarked, by putting the sign . below, or by placing the sign : after it.

TABLE II.

Table of consonants when not used as sonant finals

Burmese character	English equivalent	Remarks
က ခ	k, g	The aspirated and unaspirated letters are represented by the same characters in English, the character 'h' appearing only by itself, in conjunction with a nasal or 'l,' 'w,' and in the signs 'sh' and 'th.' To an English ear and tongue the difference between an aspirated and unaspirated letter in Burmese is not easily distinguishable, and among Natives in writing the two are often interchangeable
က ခ ခ with y ခ with y င ခ င ခ င ခ င ခ	ky, gy ch, gy g ng s, z z	Whether a given letter should be pronounced 'k' or 'g,' 's' or 'z,' 't' or 'd,' 'p' or 'b,' depends chiefly on juxtaposition
ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y	ny t, d d	The general rule is that after a vowel or nasal a hard initial consonant becomes soft
ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y		This letter is pronounced like 'm' in "senior"
ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y ခ ခ ခ with y		The same symbols have been used for cerebrals and dentals Cerebrals are not of very frequent occurrence, and are almost, if not quite, unknown in the names of places and persons.

TABLE III

Table of final sonant consonants

Final sonant consonants	COMBINED WITH THE VOWEL					COMBINED WITH	Examples	Remarks
	a	ee	oo	aw	o	w		
င်း	et			ouk	ike		င်း let, င်းကွက, င်းလှ like	These are the only consonants which occur as final sonants in pure Burmese words. Where the columns are left blank, no combination occurs between these consonants and the vowels or 'w'. The sound of the finals is modified by a following letter, <i>e g</i> , င်းင်းလှ င်း is pronounced more like "lite deh loo" than like "like deh loo."
း	in			oungang			ဝ်း win, ဝ်းင်းကွက (as in count), ဝ်းင်းကွက (as in aisle)	
း	it						ဝ်း sit	
း	ee, in, eh						ဝ်း thee, ခ်းစ်း 'chin, ဝ်းစ်း leh (as in vegetate)	It is impossible without experience to say which of these sounds will be the correct one.

cō. s. t, p	at	elk	oke		oot	cō tat, sō pek (as in vein) cō yoke, qō loot
ḡ. s. r. n, m	an	ein	one		oon	ō pan; cō lein (as in rein) cō tone, ḡ moon, when w is the initial letter of the word, the result is woot, woon, cō. o. cō leh (as in vegetate)
s.	y					

The Burmese language being monosyllabic and separate words being frequently joined together to form compound expressions, a hyphen is usually employed to connect such compounds and at the same time to distinguish the component parts. For example, (မြေ) myay, 'earth,' and (နီ) nee, 'red,' form together the compound (မြေနီ) myay-nee, 'red earth.' But if these syllables are united so as to compose a single recognised word, like Red-earth Hill, it is unnecessary to retain the hyphen and is sufficient to write (မြေနီတော) Myaynee-gone. Certain names of places in Burmese are contracted or otherwise altered in pronunciation. For example, the words which should properly be "Pandoung," "Thanboola," "Pooya-galay," are contracted in pronunciation to "Padoung," "Thabala," "Paya-galay." In such cases the word should be rendered as actually sounded. If considered desirable, an apostrophe can be inserted to indicate the contraction, as Pa'doung. As an instance of alteration in pronunciation may be given နုစုးလုံ or နုစုးဝဲ. As written it would be Chayagone or Chayabin, but as pronounced, Kayagone or Kayabin.

The following list of names showing elisions of vowels and consonants is given by way of example. A list of names of places with similarly contracted or altered forms of pronunciation should be specially prepared and submitted by each Deputy Commissioner for his district.

<i>Vowels</i>		
Elisions of ee	ဘီတောက်လုံ	Pa'douk kone.
	ဘီနတ်တန်း	Pa'nat tan
	ဘီလူးကွန်း	Ba'loogyoon
„ of oo	ဘုရားကလေး	Pa'yagalay
	ပုဂံတောင်	Pa'gandoung
	ပုဒ္ဂိုလ်တောင်	Pa'zoondoung
	ကတိုးရွာ	Ka'do ywa.
	ပုထိုး	Pa'to.
	ကရင်ဂျီ	Ka'yinzoo.
	ကုလားတန်း	Ka'ladan
	သုဌေးတန်း	Tha'taydan
„ of ay	မေယဉ္ဇယ	Ma'yinzaya
„ of eh	ပဲခူး	Pa'go (Pegu).
<i>Consonant</i>		
Elisions of et	ငှက်ပျောတော	Hnga'pyawdaw.
	ခက်ရင်းဥချောင်း	Ka'yingwa choung.
	ဆက်ရက်တုံးရွာ	Za'yekone ywa.
„ of it	နွဲ့ရွာ	Koonhna'ywa.
	ဆွဲရွာ	Sehhna'ywa.

	သမြီ	Thabyoo.
	ဝါခရူ	Wagaroo.
	ကျမြီ	Koobyoo.
	မအူပင်	Maoobin.
	မူး	Roo'or Yoo.
	မင်းဘူး	Minboo
	ကော့မူး	Kawhmoo.
ay	မြေပုံ	Myaybone
	ရွှေကျ	Shwaygoo.
	ရေကြည်	Yaygyee
	သဖြေလှ	Thabyayhla.
	ရွှေဘ	Ay ywa
	ရေ	Yay.
	ရွှေ	Yway.
	အရှေ့တောင်	Ashaydoun
	ရထားတောင်	Yathaydoun.
eh	ကျီးသဲ	Kyeetheh
	ဘင်းပြီ	Binbyeh
	ထွင်းပွဲ	Hlaingbweh.
	တော်လတ်	Tawlateh.
	ကန်ပဲ	Kanbeh
aw	ဘောနီ	Bawnee
	ဘောလယ်	Bawleh
	ကော့လှ	Kawhla
	တော်ကူး	Tawkoo
	ပန်းကနော်	Pantanaw.
	ကော့ကမိုင်	Kawhareik.
	ကော့လူမို	Kawloodo
o	မိုးညို	Monyo
	မိုးပျံ	Obo
	ဖြူ	Pyalo.
	ရသေ့မြီ	Yathay-myo

Representative names illustrating Table II.

က as k	ကဝက်	Kawet
	ကွင်းလှ	Kwinhla.
,, as g	ကုံကော်ကျီး	Gangawgone.
	ရှုံးကွင်း	Shangwin
ခ as k	ခနောင်ထို	Kanoungto.
	ခတ္တိယ	Katceya.
	ခန္တသီ	Kanwehkabo
,, as g	သုးခွ	Thonegwa
	ခွေးတောက်	Gwaydouk.

ကျ as ky	နံညင်းတန်း	Gonenyindan.
,, as gy	ရှားကြီး	Shagehgyee.
ခု as ch	ကျူးပျော်	Kyonepyaw.
,, as gy	ကျောက်ကြီး	Kyounkkyee
	ရွှေကျင်	Shwaygyin
	ကျိုင်းမြစ်	Gyangmyit
	ချောင်းခွ	Chounggwa
	ကျောက်ချောင်းကြီး	Kyounkchounggyee.
	ငါးသိုင်းချောင်း	Ngathanggyoung
	စမ်းချောင်း	Sangyoung
	ချောင်ပိုင်း	Gyoungwang
ကြ as ky	ကြောင်း	Kyangin.
,, as gy	ကြာကန်	Kyagan
	ကြိပ်ကောက်	Gyobingouk.
ခြ as ch	ရွှေကြက်ရက်	Shwaygyetyet
,, as gy	ခြောက်ရွာ	Choukywa
	ခြောက်ဆယ်	Choukseh
	ကွဲခြံ	Kywehgyan.
ကျ as kyw and	ကွမ်းခြံ	Koongyan.
ky	ကွဲလူး	Kywehloo
,, as gyw and	ကွန်းတောလှ	Kyoon dawhla
gy	ထုံကွဲထုံး	Dangwyehgone.
ဂ as g	ခေါင်းဆေးကွန်း	Goungzaygyoon.
င as ng	ဂေါတမောထိုက်	Gawdamawtike.
	ငွေတောင်	Ngwaydoun.
	ငါးခုရ	Ngakooya
	ငါးငြိမ	Ngabyayma.
	ငပုတော	Ngapootaw
စ as s	စကျ	Sagoo
	စွယ်တော်	Swedaw
,, as z	မိုင်းဖွီ	Saungbyoon
	ဆင်းစောက်	Inzouk
ဆ as s	သာဓဉ်	Thazee
	ဆင်ဇဲ	Sindeh
	ဆွာမြစ်	Swa myit
,, as z	ဆိုကျန်း	Sonegone.
	လှည်းဆိပ်	Hlehzeik.
ခ as z	သုံးဆယ်	Thonezeh.
	ခေသဖြင့်	Zathabyin.
ည as ny	ခင်းကျိုက်	Zingyike.
	တောင်ညို	Toungnyo
တ as t	ညောင်ပိုင်း	Nyoungwang
	တောင်လုံး	Tounglone.
	တက်Tageh.

တ as d	မင်းထုံး	Mindone
	ရွှေတောင်	.. Shwaydounng.
ထ as t	ဆင်တဲ	Sindeh.
	သထုံ	Thatone.
	အထုံ	Atayan.
	ထန်းလေးပင်	Tanlaybin.
,, as d	မြေထဲ	Myaydeh.
	ထားပိန်	Dabem.
	ထောင့်ကြီး	Dounggyee.
ဒ as d	ဒေါပုံ	Dawbone
ဓ as d	ဒေးခဲ	Daydayeh
	ညောင်ဘီ	Dinnyawadee.
	မုဂ္ဂ	Moodone.
န as n	နတ်မော်	Natmaw
	နဝင်း	Nawin
	နဂါးဆွန်	Nagayit
ပ as p	ပေါင်းထည်	Poungdeh.
	ပေါက်တော	Pouktaw
,, as b	ရွှေပန်းတော	Shwaybandaw.
	အောင်ပင်သာ	Oungbintha.
ပ as p	မြောက်ဆိုပ်	Pyoukseik
	ဗျာပုံ	Pyapone
,, as b	ဆီးဖြူကွင်း	Zeebyoogwin
ဗ as b	ဗောဓိကုံး	Bawdeegone
	ဖြိုင်းကွန်း	Byainggyoon.
ဘ as p	ဘောင်းလင်း	Pounglin.
	ဘောင်မိုး	Poungyo.
,, as b	ဘီလင်း	Beelin
	ဘောမီ	Bawmee
မ as m	မြောင်းမြ	Myoungmya.
	မင်းမြား	Minbya
ယ as y	ယေယဝတီ	Zayyawadee
	ယောက်သွား	Youkthwa.
	ယင်းအုန်း	Yinone
	ယွန်းလင်း	Yoonzalin.
ရ as y or r	ရေကင်း	Yaygin
	သာဂရ	Thagaya, Thagara.
	မရပ်	. Mayaman, Maraman.
လ as l	လွတ်တာ	. Labootta
	လေးမျက်နှာ	Laymyethna.
ဝ as w	ဝဲကြီး	Wehgyee
	ဝင်းပတော	Winbadaw
သ as th	သာပေါင်း	Thaboung

က as h	သရက်ပင်	Thakootpin.
With c hng	သမိုင်း	Thamaing
„ ည hny	ဟိုင်းကြီး	Hone
„ န hn	ငှက်ခေါင်း	Hainggyee.
„ ဝ hm	ကျောက်ညှစ်	Hngatgoung
„ ခ sh	နာမောင်းကျ	Kyoukhnyat
„ ဝ hl	မွှေဝန်း	Hnamounggya.
	ရှားဝေးဖို	Hmawwoon
	ထွက်ကား	Shazaybo
		Hlawga.

Representative names illustrating Table III.

က et	သရက်	Thayet
	ဘက်ညှစ်	Petyeh
က ouk	ဝက်ထီးကန်	Wetteegan
	နတ်မောက်	Natmonk
	ပေါက်ကုန်း	Poukkone
ဝ က ike	ကျောက်တန်း	Kyoutkan
	ကျိက္ကဆံ	Kyikekasan
	ပိုက်သောင်	Pikethoung.
	ကြက်ထိုက်	Kyettike
က	ခဲကန်	Okekan
	ကျွတ္တိပင်	Kokekobin.
က in	တင်တော	Tindaw
	မင်းတပ်	Mindat
	လွင်မြိုင်	Lwinbyin
	ကွင်းလောက်	Kwingouk.
က ၇၆ oung	သောင်ရင်း	Toungyin
	ကနောင်	Kanoung
	ရွှေလောင်း	Shwayloung
	မြောင်းတင်	Myoungtanga
ဝ ၆ aing	ပန်းလှိုင်	Panhlaing
	ရဟိုင်	Rahaing
	အိုင်ကလောင်	Aingkaloung.
	မိုင်းကောင်း	Zaingganaing
က it	စင်ထရ်	Sittayan
	အုပ်ရှစ်ကုန်း	Okeshitkone
	မြိမ်မာ	Myitmaka.
ည ee	စည်သာ	Seetha.
	မဉ္ဇူလှိုင်	Myeezoogone.
	စည်ပင်	Seebin.
„ in	ပျဉ်းမနား	Pyinmana
	ပျဉ်းမပင်	.Pyinmabin.

	ညာဏ်လည့်	Nyanleh.
	လှည်းဆိပ်	.Hlehzeik.
	တည်းကူး	Tehgone.
တ် at	နတ်တောင်း	Nattalin
	ဝါတ်တော်ကူး	Dattawgone.
	နတ်မော်	Natmaw
ဗတ် aik	သမိတ်ကွဲ	Thabeikkweh.
	မိတ်စွယ်	Peiksweh
တ် oke	မှတ်ကွန်း	Moke-kyoon.
	ပုတ္တလုပ်	Poke-taloke
	အုတ်တွင်း	Oke-twin
တ် oot	ရွာအုတ်	Ywaloot.
	အလပွတ်	Alaboot
	ဆားတိုင်မွတ်	Sadaingmoot
ဒ် a	ကင်းတပ်	Kindat
	ကျိုက်လပ်	Kyikelat
	သနပ်ပင်	Thanatpin
ဒ် aik	ဆိပ်ကြီး	Seikkyee
	လိပ်သောင်း	Leikthoung.
	သံထိပ်	Thandeik
တ် oke	လက်ချပ်ပင်	Letkokepín
	ဝက်ပုပ်	Wetpoke
	တရုပ်မော်	Tayokemaw
	ဆင်ထုပ်	Sindoke
နံ an	ထန်းတပင်	Tantabin
	ပန်းတော	Pandaw
	မြန်အောင်	Myanoung.
	တန့်ကိုး	Bangone
ဗ် aik	တာထိန်	Pathem.
	ထိန်တော	Teindaw
	ဝင်းမိန်	Winsein
	မိန့်ကိုး	Peinnehgone.
	သစ်ဆိန်ကိုး	Thitseingone.
တ် aik	အုန်းကွန်း	Onegyoon
	ကိုးတန်း	Konedan
တ် aik	ပာပွန်	Papoon
	အဂ္ဂန်း	Agoon
	သလျက်စွန်း	Thanlyetsoon.
ဒ် an	အမ်း	An
	စမ်းချောင်း	Sangyoung
	သမ္ဘရာတိုင်း	Thanbayadaing.
ဗ် aik	လိပ်ချောင်း	Theingyoung
	မိပ်မိပ်	Einmeh.
	ရင်းငြိပ်	.Yinnyein.

၀ န oon	အောက်မနိဉ်	Oukmanein
• an	ကွင်းချောင်း	Koongyoung.
	ဝံရွေး	Sanyway.
	ကြောင်း	Kyangin.
	အုံကြီး	Angyee.
[one	ချောင်းဆုံ	Choungzone
	ကျပ်တုတ်	Kyonepadoke.
	ထုံးဖို	Tonebo.
• oon	ခန္တ	Zaloon.
	ထွံတေး	Toontay, Twantay.
ယ် eh	ဘာလယ်	Bawleh
	ပျော်ဘွယ်	Pyawbweh.

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REPORT AND GAZETTEER

OF

BURMA, NATIVE AND BRITISH.

PART I.—NATIVE BURMA.

CHAPTER I.

HISTORY OF BURMA *

ANCIENT KINGS OF PAGAN

THE Burmese and Arakanese historians claim a miraculous origin for the founders of their reigning families, and, to support this, have embellished their accounts with incredible fictions, and, in the case of the Arakanese, statements which their own religious books contradict.

The Taluings assert, with a show of probability, that their sovereigns were descendants of Thu-bin-ga (Unga of the southern coast of India). It is impossible to fix any definite period at which fable ceases and history commences, for fable only very slowly passes into history, the truth of which can be proved by comparing it with the history of neighbouring States. Only a brief outline is therefore given of the ancient history of Burma, and although the details are often more legend than history, they still enable us to fix the principal events with tolerable accuracy, and give us a fair idea of the state of Burma and the adjoining kingdoms in ancient times.

The Burman historian of the past was probably not more a slave to truth than when he wrote the following account of the First Burmese War, which is here given as entered in the Royal Chronicle of the Burmans —

“In the years 1186 and 1187 (Burmese era) the *Aula ppyu*, or white strangers of the West, fastened a quarrel upon the Lord of the Golden Palace. They landed at Rangoon, took that place and Prome, and were permitted to advance as far as Yandabo, for the king, from motives of piety and regard to life, made no preparation whatever to oppose them. The strangers had spent vast sums of money in their enterprise, so that by the time they reached Yandabo their resources were exhausted, and they were in great distress. They then petitioned the king, who, in his clemency and generosity, sent them large sums of money to pay their expenses back, and ordered them out of the country.”

In this manner the Burmese registered their case in the national archives, ignoring the fact of their being the aggressors and of their king being compelled to renounce all claims on Assam, Cassay, Arakan, Martaban, Tavoy, and Tenasserim.

* From *Gazetteer of British Burma* and Sir Arthur Phayre's *History of Burma*.

In the Maha-raza-weng, or Chronicles of the Kings of Burma, the foundation of the kingdom of Burma is placed in the beginning of the tenth century

King of Pin zala defeats Sa- B.C, or some six hundred years before Alexander
kya kings, 1000 B C invaded India The king of Kan-tha-la and Pin
z 1-la-reet having defeated the Tha-kee (Sa-kya) kings of Kan-lee-ya, Dewa-

da-ha and Kap-pi-la-wot (Ka-pee-la-vas-tu) and
Abhi raza settles at Ta gongg overrun their territories, Abhi-raza, king of the
Tha-kya Tha-kee race in Kap-pi-la-wot, abandoned his country, and, crossing
the country eastward, founded a new kingdom, with the capital at Ta-goung,
then called 'Then-gra-tha-ra-ta, on the left bank of the Irrawaddy, in about
23° 30' N lat On his death he left two sons, Kan-riza-gyee and Kan-
raza-ngay, who quarrelled as to the succession The elder brother, collecting

Kan-raza gyee travels west his followers, left Ta-goung and established himself
at Ka-le-doung, west of the Chin-dwin river At
that time the tribes called Pyoo-kam-yan and Thek asked for a king, and he
made his son Moo-doo-seit-ta king over the Pyoo Kan-raza-gyee went west-
ward and established himself on a mountain called Kyook-pantoung, east of the
Gat-tsha-ba or Koo-la-dan river

King Kan-raza-ngay had thirty-one successors, the last of whom was
driven southwards by an irruption of the Chinese, and settled at Malay, about
8 miles above Amarapura, where he died His people divided into three parts
one went eastward and established the Shan States, another went down the
Irrawaddy and joined the Pyoo, and the third remained in Malay with the
chief queen Na-gra-shien-ga At this time Gaudama appeared in Ka-pee-la-
vas-tu During his lifetime this place was again attacked and conquered,
and Dza-raza, one of the princes, fled to the Kabo valley Thence he
removed to Malay, and, having married Na-gra-shien-ga, the two returned
northward, and founded Upper or Old Pagan, and some years later removed
to Ta-goung This king established a regular government By his two chief
queens he had twenty sons and twenty daughters, and the sons married their
half-sisters Gautama here appears To this king succeeded seventeen
kings, whose reigns were all short

At this period there were, according to the Maha-raza-weng, two king-
doms, that of Ta-goung and the Pyoo, Kan-ran and Thek, both ruled by
descendants of the Ishwaksu dynasty of Ka-pee-la-vas-tu The second of
these was subsequently destroyed by repeated attacks from Arakan

Maha-tham-ba-ba, son of the seventeenth king, in 453 B C married

Maha tham ba ba, first king the daughter of a hermit at Prome He after-
wards took the queen of the Pyoo as his second
of Prome, 453 B C wife, and by her had a daughter, having already a son, Dwot-ta-boung, by his
cousin Bhe-da-rie After a reign of six years he died, and was succeeded by his

Dwot ta boung younger brother Soo-la-tham-ba-ba, who reigned
for thirty-five years, and was succeeded by his
nephew Dwot-ta-boung, who founded the city of Tha-re-khetra

Dwot-ta-boung was succeeded by eight kings, whose reigns extended to
114 B C A change in the dynasty then occurred, for which the Burmese
historians invent an absurd story to gloss over a foreign conquest

In the chronological tables Tapa is called a foreigner He was suc-
ceeded by fifteen of his descendants, the last but
Tapa, 114 B C one of whom, Thoo-pa-nga Na-ga-ra-sienga, is
said by the Burmans to have conquered Arakan This, however, seems fiction,

as no notice of such conquest can be traced in the Arakanese annals. He was succeeded in 882 A D by his nephew Tha-moon-da-rit, whose first act was to reform the calendar and change the era. The Arakanese twice overran the country, and, on the second occasion, destroyed Tha-re-khettra. Tha-moon-da-rit fled from place to place, and at last,

Tha moon da rit, 882 A D

ascending the Irrawaddy, refounded Pagan, near Ta-goung, now known as "Old Pagan." One of the old Ta-goung race of kings greatly assisted him in establishing his new kingdom, and married his daughter, and afterwards succeeded him. Including Tha-moon-da-rit, eighteen kings reigned in Upper Pagan. These were succeeded by the usurper Poop-pa-saw, who in 628 or 639 A D changed the era and adopted that now in common use throughout the country.

Poop-pa-saw was succeeded by his brother Pyen-pya, who, probably

Poop-pa saw, 639 A D

driven south by the Shan and Chinese, transferred his capital to Lower Pagan. Twenty-one kings pass in rapid succession, and in 1017 A D A-naw-ra-hta-meng-saw ascended the throne. He is the second among the five monarchs to whom the Burmans apply the epithet "great." This king, a devoted follower of Gandama, led by his anxiety to possess copies of scriptures and relics of the Buddha, invaded

A-naw-ra-hta-meng-saw, "The Great," 1017 A D
Invades China and Pegu and China in the north and Pegu and Arakan in the south. He was met by a large Chinese force, and was obliged to retire. His invasion of Arakan was also a failure. Not long before his death he invaded and conquered Pegu. During this king's reign Buddhism was firmly established, and purged of the numerous heresies which had sprung up. About the same time there was a revival of Buddhism in Thibet and throughout those portions of India where it still lingered.

Revival of Buddhism

A-naw-ra-hta-meng-saw, to whom was mainly due the prosperity of the Pagan monarchy, left to his son and successor, Ky-an-sit-tha, territories which probably included the Shan States in the north and east, the country now called Upper Burma, Pegu, and the whole Tenasserim coast, while Arakan, if not actually tributary, was weak and dependent to a considerable extent on the king of Pagan.

Kyan sit tha

Kyan-sit-tha appointed his foster brother, Ra-man-han, as Governor of Pegu. He rebelled and marched an army of Peguins against Pagan, but, though at first successful, was eventually defeated and killed.

At about the same time Meng-re-bhoorn, the rightful sovereign of Arakan, was driven out and took refuge at Pagan, where he died, leaving a son named Lek-yu-mang-nan.

Ra man han Governor of Pegu, rebels is killed
In 1085 A D Kyan-sit-tha was succeeded by his son Aloung-see-thoo, and shortly after his accession the Governor of Tenasserim threw off the Burman yoke, but the rebellion was speedily suppressed. In 1108 A D Aloung-see-thoo actively interfered in the cause of Lek-ya-meng-nan of Arakan, and despatched an army to aid him in the recovery of his throne. Theng-kha-ra, who had usurped the throne, had been succeeded by his son Meng-than, and then by his grandson Meng-pa-dee.

Aloung see-thoo, 1085 A D

Tenasserim revolts

of Lek-ya-meng-nan of Arakan, and despatched an army to aid him in the recovery of his throne. Theng-kha-ra, who had usurped the throne, had been succeeded by his son Meng-than, and then by his grandson Meng-pa-dee.

The Talaing force proceeded by sea and the Burman by land the former being defeated, the latter retired without attempting anything. Another force was sent by land, which defeated the Arakanese and restored Lek-ya-meng-nan to the throne of his ancestors.

Arakanese defeated and Lek-ya-meng-nan restored, 1102 A.D.

Aloung-see-thoo died in 1160 A.D., and was succeeded by a king known in history as Koo-la-kye-meng, or the king dethroned by the foreigners, who appear to have been Cingalese. In Aloung-see-thoo's time there was considerable intercourse between Burma and Ceylon.

Na-ra-pa-tee-see-thoo, the son of Koo-la-kye-meng, ascended the throne in 1167 A.D. He was a devout Buddhist, and one of the most famous monarchs in Burmese history. He repaired and restored the pagodas at Toungoo (Toung-ngoo), said to have been built in the time of A-thaw-ka (Asoka). He visited all parts of his kingdom. He had constant communication with Ceylon, and four Rahnás from that country settled at Pagan and introduced new philosophical doctrines. This king established Buddhism in Tavoy, and is said to have ruled from the borders of China to the mouths of the Tenasserim. He reigned for thirty-seven years, and was succeeded by his son Le-ya-thien-ga.

Le-ya-thien-ga, 1204 A.D.

Na-ra-thee-ha-pa-dee

Le-ya-thien-ga was followed towards the end of the twelfth century by Na-ra-thee-ha-pa-dee.

In the year 1277 the Burman, incensed at being required to pay tribute to the Emperor of China, crossed the frontier at Yungchang with an army of 50,000 men and 800 elephants, and in the plain of Vorchan were met by the Tartar army, greatly inferior in numbers. The Burmese were defeated with great slaughter.*

A few months after the Tartar General Nasruddin with a force of 4,000 men advanced into Burma as far as Kuang-then (which appears to have been on the Irrawaddy near Bhamo), but effected little, and the expedition seems to have been nothing but a reconnaissance.

In consequence of the report of Nasruddin as to the ease with which the country could be conquered, an invasion was ordered under Prince Singtur. The army started from Yunnan-fu, then called Chungking, in the autumn of 1283. They made use of boats to descend the river Oho to the fortified city of Kuang-then, which they took and sacked. But, as the king still refused to submit, they then advanced to the "primitive capital Tai-kung (Ta-goung), which they captured. The decisive victory of the Chinese was fought at Malay†. The Burmese king fled to Prome.

From this event Na-ra-thee-ha-pa-dee is known as Ta-roop-pye-meng, or the king who ran away from the Tartars. He was poisoned at Prome by his son Thi-ha-thu, and was succeeded by his son Kiaw-swa.

In about 1300 the Shan under three brothers invaded the kingdom, and Kiaw-swa, betrayed by his queen, was forced to become a monk. The Emperor of China sent an army to restore the rightful sovereign, whereupon the three generals cut off Kiaw-swa's head and showed it to the Chinese generals, who withdrew their forces and returned to China. The once formidable kingdom of Pagan was now divided Arakan

Kiaw swa.

Second Chinese invasion, 1300 A.D.

* See Yule's *Marco Polo*, vol. II, pages 77-78 (note).

† *Marco Polo*, vol. II, page 95 (note).

and Pegu were completely independent, and Burma was parcelled out amongst a number of Shan adventurers

The country now known locally as Pegu in ancient times included the whole coast from Hmaw-deng to Moulmein, together with the lower portions of the valleys of the Irrawaddy, Sittang, and Salween, and was known as Ra-ma-nga, or the country of Rama

Before Gaudama appeared, there reigned a certain king Tee-tha in the Karanaka city of Too-peng-na. He had two sons, one of whom built Tha-htoon. It is supposed that Talaing immigrants from Telugana introduced Buddhism here, where the people listened to them, but the inhabitants of the surrounding country were Kolarian Moon

In 241 B C two Buddhist missionaries were deputed to Thoo-won-na-bhoom-me. They were successful in propagating the reformed doctrines, and Buddhism was triumphant

In 400 A D the sacred Buddhist books were brought from Ceylon by Buddha-Ghossa

Tha ma-la founds Pegu, 573 A D The city of Pegu was founded about 573 A D by Tha-ma-la

Tha-ma-la founded Martaban three years after he had founded Pegu, and subsequently built other cities. After twelve years reign his brother Wee-ma-la conspired against him and put him to death. He left a son aged seven, whom his mother sent to the mountains for safety. Wee-ma-la reigned seven years. In the third year of his reign, 588 A D, he founded Sit-toung, and in the fifth he repulsed an attack of the king of Vizianagram

Katha-koo mara, 592 A D In 592 A D his nephew succeeded him as Katha-koo-mara. He was remarkable for his attachment to Buddhism. He died in 599, and was succeeded by his son Mahimoo-Arinda Raza. He was succeeded, after a short reign of seven years, by his son Mahintha Raza. Thirteen kings followed, but the hereditary succession was broken by usurpers. Tha-htoon

Mahimoo Arinda Raza, 599 A D appears gradually to have declined, but it is not clear when and how it passed from the capital of an independent kingdom into a provincial city of the Pegu dominions. The sixteenth king was a usurper, named Poon-na-ree-ka, who is supposed to have ascended the throne in 746 A D. He was religious, but inclining towards Hindu traditions, and rebuilt the city of Aramana on the site of the present Rangoon. He was succeeded by his son Thee-tha in 763 A D, who died after a reign of twenty years. From this time there is a blank of five hundred years in the annals of Pegu, during which the names of no native kings are entered. After the conquest by A-naw-ra-hta-meng-saw in 1050 A D, Pegu became subject to Burma for about two hundred and thirty years. After mentioning the names of three Burmese kings the narrative passes on to events near the close of the fourteenth century, when Mongals and Turks overthrew the Burmese monarchy. Pagan was captured, and her king fugitive

Poon na ree ka, 746 A D Thee tha, 763 A D

As we have already seen, Kan-raza-gyee, the eldest son of Abhi-raza, the son of the first founder of Ta-goung, on leaving History of Arakan his brother Kan-raza-ngay in possession of his father's kingdom, travelled south, and finally settled in the Kyounk-pan hill

in Northern Arakan This, according to Arakanese annals, occurred in 825
 Dha nga wad dee founded by B C, and there was then in existence a powerful
 Ma ra-yoo, 2568 B C kingdom called Dha-nga-wad-dee, over which fifty-
 four kings had reigned from Ma-ra-yoo, who founded the kingdom and
 dynasty in 2658 B C

From this king the Arakanese legends profess to furnish a list of kings
 without a break up to the time of the Burman conquest in 1784 A D

On the death of the fifty-fourth king, Meng-ngay-pzaw-tha-see, three nobles
 successively usurped the throne, and the queen and
 her two daughters were obliged to fly for safety to
 the hills They joined Kan-raza-gyee on the Kyouk-pan hill, and he married
 the two daughters Twenty-four years afterwards
 he left his retreat (825 B C), and, driving out the
 usurpers, became king of Dha-nga-wad-dee and reigned for thirty-seven
 years

After twenty-eight kings had reigned for 971 years, San-da-thoo-re-ya
 ascended the throne, and during his reign, between
 146 A D. to 198 A D, Buddhism was introduced,
 and became the State religion

San-da-thoo-re-ya died after a reign of fifty-two years, and was followed
 by twenty-four sovereigns.

The ninth king, Soo-la-ting-san-da-ra, who came to the throne in 951
 A D, conquered Chittagong After his death
 a change of dynasty occurred, and a chief of the
 Mro tribe was placed on the throne During his
 reign the country was unsuccessfully invaded from the east His nephew

Soo la ting san da ra conquers
 Chittagong, 951 A D

Pebyoo ascends the throne,
 964 A D

Shans conquer Arakan.

he retired The Talang now for the first time
 appear on the scene, and during this disturbed period held possession of
 Than-dwai (Sandoway)

Soon after the Shans had retired, A-naw-ra-htee, king of Pagan, invaded
 Arakan, but unsuccessfully A posthumous son of Soo-la-ting-san-da-ra then
 ascended the throne, but, after a reign of twenty-four years, was killed
 in 1018 A D, and was succeeded by his brother

Khet-ta reng succeeds, 1018 A D
 Khet-ta-reng Five kings succeeded in the
 next forty-two years, and then two nobles usurped the throne, when a son of
 the fifth king regained possession of the kingdom, but in 1078 the
 dynasty again lost the throne, and the rightful heir, Meng-re-bhoora, fled
 to Pagan Here he married his sister, and a son named Lek-ya-meng-nan
 was born

In 1102 Aloung-see-thoo, king of Pagan, espoused the cause of Lek-ay-

Lek ya meng nan restored, meng-nan, and invaded Arakan by sea and by
 1102 A D land After one repulse the Burmese were successful,
 and Lek-ya-meng-nan was restored to the throne of his father He died in

Gaw la-ya, 1138 A D

1109, and was followed by four kings in quick
 succession, after whom, in 1138 A D, came Gaw-
 la-ya, to whom, according to Arakanese history, the kings of Bengal,
 Pegu, Pagan, and Siam did homage, but there is nothing in the Burman
 or Talang annals which in the slightest degree supports the Arakanese views
 Aloung-see-thoo, when he died a few years after Gaw-la-ya, left to his

successor larger dominions than had ever been under the Burman sway before.

Da-tha-raza, 1153 A D

Gaw-la-ya died in 1153 A D, and his son Da-tha-raza succeeded him

Da-tha-raza died in 1165 A D,

and was succeeded by his son A-naw-

A-naw-thee-ree, 1165 A D

thee-ree, who is said to have lost his father's and grandfather's extensive empire, and to have passed

his days in debauchery, neglecting all his duties. He was killed two years

Meng-hpoon-sa, 1167 A D

after his accession in an outbreak of his subjects, and his brother Meng-hpoon-sa was placed upon

the throne

In his reign a Shan army invaded the kingdom, but was defeated. He removed the capital to Khvit on the Le-mro. He reigned for seven

Peng-sa-ka, 1176 A D

years, and was succeeded by his son Peng-sa-ka

Gau-na-roo-baw, 1176 A D

in 1176 A D, after whom came his son Gau-na-

Mee-zoo-theng, 1180 A D

roo-baw in 1176. He was dethroned three years later by a usurper named Sa-lung-ga-bo, who

was killed the first year of his usurpation, and Me-zoo-theng, Gau-na-roo-baw's brother, was raised to the throne. He was so much beloved by his people that he is surnamed Taing-Khyit, or "country beloved."

The succeeding ten kings were execrated by their subjects, the last of

Lek-ya-gyee, 1210 A D

these was deposed in 1210 A D, and was succeeded by his son Lek-ya-gyee, who restored the

A-lu-ma-hpyoo, 1217 A D

prosperity of the country. Four kings followed,

and in 1237 A D A-lu-ma-hpyoo ascended the throne.

His son Raza-thoo-gyee commenced to reign in 1243. During his reign the Talang unsuccessfully invaded Arakan.

Nothing worthy of note occurs till the reign of Nan-kye-gyee. He

Nan-kye-gyee, 1268 A D

so oppressed the people that he was killed by the commander of the body-guard in the fourth year

Meng-bhee-loo, 1272 A D

of his reign. He was followed by his son Meng-

bhee-loo, who was killed after four years' reign by the murderer of his father, who himself ascended the throne and was killed three years later.

Meng-dee, then seven years old, now succeeded. It was during his reign

Meng-dee, 1279 A D

that the Shan invaded Pagan and drove Ta-roop-

pye-meng to Bassein, and that the Pagan kingdom was partitioned amongst petty Shan chiefs.

The three Shan brothers who dethroned and subsequently murdered

Burma.

From the breaking up of the Burman kingdom at the close of thirteenth century to the rise of Ta-beng-shwee-htee of Toung-goon first half of sixteenth century

Kyan-swa were grandsons of the chief of the petty Shan State of Bhien-na-kha. On his death

his sons quarrelled as to the succession, and the younger, Thiang-kha-bo, fled with his followers

to Burma and settled at Hyeng-shaing, a place about 30 miles south of Ava. Here he had

three sons, A-theng-kha-ra, Raza-theng-gyan

and Thee-ha-thoo, and a daughter. The family was taken into high favour both by Ta-roop-pye-meng and by Kyan-swa, and by the latter the sons

were appointed governors of the districts of Myeng-shaing, Mek-kha-ra, and Peng-lay respectively, whilst the daughter was married to one of the

king's sons. After the death of Kyan-swa the seat of government was for some time at Myeng-shaing, and there the rebels were besieged by the

Chinese army. For several years the three brothers lived together, each

governing his own province, the eldest alone having a royal palace and using the insignia of royalty. A younger son of Kyaw-swa fled to Thayet and assumed the governorship, and the whole kingdom was broken up into petty chieftainships, the rulers of which were continually intriguing against each other.

Thee-ha-thoo, the youngest of the three Shan brothers, by the death of his brothers, one of whom he poisoned, attained sole power and built a new city at Pawya, subsequently called Peng-ya (the classical name was Wee-za-poo-ra), where Ava now stands, and when it was completed he and his queen were invested with the royal dignity by formal entrance into the palace, enthronement beneath the white umbrella, and solemn pouring out of water.

Oo-za-na, 1322 A D Thee-ha-thoo died in 1322, and was succeeded by the crown prince Oo-za-na.

After a reign of twenty years Oo-za-na abdicated and left the palace by the western gate, as Kyaw-swa II entered by the eastern.

Kyaw swa, 1342 A D

Kyaw-swa married Saw-oom-ma, the daughter of the fugitive prince of Thayet. He reigned nine years, and in 1359 was succeeded by his brother Na-ra-thoo, who married Saw-oom-ma, his brother's widow.

A-theng-kha-ya, who had made himself independent in Sit-kaing, died,

A-theng-kha-ya of Sit-kaing, after a reign of seven years, in 1315, and was succeeded by his half-brother Ta-ra-bya-gjee, who, 1305 A D

fourteen years later, was dethroned by his son Shwe-doung-tek. Three years later Shwe-doung-tek and his dethroned father were put to death, and Kyaw-swa the eldest son of A-theng-kha-ya, was made king. This was in 1339, when Oo-za-na was reigning in Peng-ya. He was succeeded after ten years by his brother Naw-ra-hita-

Ta-ra-bya-ngay of Sit-kaing, meng-rai, who in seven months was followed by 1349 A D Ta-ra-bya-ngay, the youngest son of A-theng-kha-ya.

The daughter of A-theng-kha-ya, named So-meng, had been married to Meng-byouk of Sit-kaing, Tha-do-shen-htien, and had a son, Ra-hoo-la, and 1352 A D two daughters. After his death she married Meng-byouk, who was now placed on the throne, and Ra-hoo-la was sent to govern Ta-gongg.

When the Burman monarchy broke up at the end of the thirteenth century, Prome and Tounghoo, as well as Myeng-taing, Peng-ya, Sit-kaing, and Thayet, became independent. The Governor of Prome at that time was a grandson of Ta-roop-pye-meng, a cousin of Kyaw-swa, and a second cousin of the Governor of Thayet, Meng-sheng-swa.

Na-ra-thoo, King of Peng-ya, unable by himself to overcome the ruler of Sit-kaing, called in the Mo-goung Shan from the north, who advanced,

Na-ra-thoo calls in the Mo-goung Shan, who take Ta-goung, Re-hoo-la was governor. The Shan continued to advance, and made themselves masters of Sit-kaing. The Shan chief then turned his arms against Peng-ya, which he plundered, and retired taking the king with him. Re-hoo-la, who had taken the name of Tha-do-meng-bya, fled, on the capture of Ta-goung, to his step-father Meng-byouk, then ruling Sit-kaing, by whom he was imprisoned.

After the events narrated above, the subjects of Meng-byouk, being much discontented at Re-hoo-la escaping, captured and put him to death. He advanced

Re-hoo-la, called Tha do meng bya, becomes king of Peng ya and Sit kang, 1364 A D against Peng-ya, where Oo-za-na-byoung, an elder brother of Na-ra-thoo, had been reigning for three months, took it, and, putting Oo-za-na-byoung to death in 1364, declared himself king of Peng-ya and Sit-kang. He married Saw-oom-mia, who was thus the wife of four kings in succession.

Tha-do-meng-bya founded a new city at Eng-wa (Ava) on the left bank

Founde Ava.

of the Irrawaddy, and called it Ra-ta-na-poo-ra ("city of gems"). He received the homage of Saw-mwon-huit, who was allowed to remain at Pagan and retain the name and emblems, without the power, of royalty, and extended his territories northwards. In 1367, when besieging Sa-goo, he died. He was succeeded by his brother-in-law Ta-ra-bya-saw-kai, third son of Meng-sheng-saw, the

founder of Thayet, who assumed the title of Meng-gyee-swa-saw-kai. He recovered Prome, and appointed his brother Saw-ran-noung as governor, and exacted presents from the king of Toungoo. He annexed Ka-lay and Mo-nyeng, and refusing the throne of Arakan, which was offered him on the death of Meng Bhee-loo, he appointed his uncle as tributary king, and on his death Saw-mee, whom, however, the Arakanese drove out, and remained independent. He entered into friendly relations with Heng-mai and had an interview with Sheng-hpyoo-sheng, king of Pegu, exchanging presents and giving mutual pledges of friendship.

Sheng-hpyoo-sheng died in 1383, and was succeeded by his son under the title of Ra-za-dhue-rit-Houk-bya. The Talung ruler of Bassein incited Meng-gyee-swa to invade Pegu. From this time till the final conquest of the Talung kingdom by Aloung-bhoora, in the middle of the eighteenth century, the two nations were continually at war.

As before mentioned, Pegu had been conquered by the Great A-naw-rahta-meng-saw in about 1060 A D, and remained under Burman dominion for two centuries and a half. Shortly before the disruption of the Burman

kingdom there had been troubles in these parts, which eventuated in A-kham-won proclaiming himself king under the title of Thoo-nek-khouk-sa-raza. He was killed after a reign of three years, and his brother A-khyeng-won succeeded him under the title of Ta-ra-pya.

About this time Martaban became independent. A merchant named

Ma-gu-do became king of the country under the name of Wa-ia-ru. He conquered Pegu, and was put to death by his grandchildren in 1306 A D. He was succeeded by his brother Khwon-law, and the king of Siam as his suzerain ratified his assumption of the throne. He was weak and incompetent, and was shortly put to death by his brother Mung-ba-la, who put his own son Zaw-aw-theng-nihang

of on the throne. This king, although married to a daughter of the king of Siam, went to war with that monarch, and eventually became independent. He annexed Law-boon, Tavoy, and Tenasserim, the latter two subject to Siam, to his dominions. Thus commenced the quarrel between Pegu and Siam, which in years long attended to wars—the main cause of the present depopulation of the country.

This king was succeeded by his brother Zaw-ziep, who assumed the title of Bya-nya-ran-da, and changed the site of the capital to Pegu. He lost Tavoy and Tenasserim, which were reconquered by Siam. In 1330 he was killed in an attack on Prome. Two aspirants to the vacant throne were successively killed, and eventually Bya-nya-law was made king. He married San-da-meng-la, daughter of the late king. He died in 1343, and was succeeded by his nephew Bya-nya-oo, called Seng-hpyoo-sheng. This king was driven to Pegu by his cousin Bya-ta-ba, who revolted during his absence from the city, and Martaban became independent of Pegu. His son Bi-nya-ngwe rebelled against him, and, the king dying, he succeeded him in 1385.

Bya nya oo of Pegu, 1343.
Bi nya ngwe or Ra za dhie rit of Itanگون and Pegu, 1385

This king was one of the greatest of all the Talaing monarchs. In his reign there was constant war between the Talaing and Burma, but all his endeavours to consolidate a permanent Talaing kingdom failed before aggressive Burma.

In 1404 he moved up the Irrawaddy with a large force and laid siege to Ava, while he sent another force against Ta-goung. The enterprise failed, and the Pegu forces retired without taking the capital. Shortly after he made peace with the king of Burma and married his daughter. The boundary between the two countries was fixed, and Prome acknowledged Burman territory.

The Arakanese now rebelled against their king Meng-saw-mwon, and called in the aid of the Burmans, when the king flying to Bengal, the Burmans remained undisputed masters of the country.

Meng-saw-mwon's son, Na-ra-miet-hla, took refuge in Pegu with Ra-za-dhie-rit, who sent an army into Arakan, defeated the Burmans, captured Ka-ma-roo, Meng Khoung's son-in-law, who had been appointed governor, and put him to death.

Meanwhile Meng Khoung had been engaged putting down a Shan rebellion. On learning what had taken place in Arakan he advanced against Pegu via the Sitoung valley. The Talaing army moved against him, but, being repulsed, retired to Pang-yaw, and the Burmans ravaged the country, of which they were in possession. But when the rainy season commenced the Burman troops began to suffer, and Meng Khoung, frightened by a night attack made on his camp, ordered a retreat, which soon became a rout. One of the queens was captured, and married Ra-za-dhie-rit. Next year another unsuccessful invasion took place, and in 1410 the king's eldest son, Meng-re-kyaw-swa, descended the Irrawaddy in command of a large army and fleet and entered Bassein, but failing to take Myoung-mya or Bassein, returned to Prome, and, crossing thence into Arakan, defeated Na-ra-miet-hla, who fled to Bengal.

Burmese retreat.
Meng re kyaw swa invades Bassein, 1410
 fleet and entered Bassein, but failing to take Myoung-mya or Bassein, returned to Prome, and, crossing thence into Arakan, defeated Na-ra-miet-hla, who fled to Bengal.

Invades Arakan
 Arakan was then placed under Burman governors. Ra-za-dhie-rit now sent a force into Arakan, which took Sandoway, and, after driving off a Burman force which marched to its relief, pushed on to the capital, which the Burman governor abandoned. The Shans having rebelled and called in the aid of the Chinese, the Burman forces were fully occupied. Taking

Ra-za-dhie-rit relieves Arakan

Attacks Prome.

advantage of this, Ra-za-dhie-rit advanced against Prome. The Peguans having firearms for some time had the advantage, but were blockaded by the Burmans. It was then arranged that there should be a fair fight between two

Talaing forces retreat war-boats, one on each side, but the Talaing boat was treacherously attacked by four Burman boats, and the Talaing forces then retreated, and were pursued by Meng-re-kyaw-swa, who occupied Dala, Rangoon, Syriam, and Hmaw-blee, and to whom the whole of the western delta of the Irrawaddy submitted. The Shan Saw-bwa Nga-thai-wee, instigated by Ra-za-dhie-rit, having invaded the upper country, the Burman army was withdrawn. In the meanwhile the Talaing forces had retired from Arakan.

The following year (about 1412) a Burmese column under Meng-re-kyaw-

Meng-re-kyaw-swa invades swa came down the Irrawaddy and captured Khe-Pegu, 1412 bounding in Bassein, invested Dala, and some time later took Bassein and Myoung-mya. The king of Toungoo also invaded Pegu, but was driven back. At this time the Chinese invaded Burma, but at their suggestion the question was settled by a single combat between a horseman on each side. The Burmans, who were represented by a Talaing, were victorious, and the Chinese retired. Ra-za-dhie-rit now raised the siege of Dala, and in the fight which ensued Meng-re-kyaw-swa was mortally wounded and taken prisoner, and died next day, 1416. Thee-ha-thoo, another son of Meng Khoung, was then declared crown prince. This prince commanded another Burman expedition against Pegu, which effected little. Meng Khoung died in 1421 after a reign of twenty-one years, and Ra-za-dhie-rit in the following year. He reigned thirty-eight years.

Meng Khoung was succeeded by his son Thee-ha-thoo in 1421. Thee-ha-thoo or Sheng hpyoo-sheng, king of Burma, 1421 A.D.

Ra-za-dhie-rit was succeeded by his son in 1422, Bya-ngya-dham-ma-ra-za. He was poisoned in 1425, and his brother Bya-ngya-ran-khek succeeded him. The Burman king was killed in 1425 in an action with the Shans. He was succeeded in 1426 by the chief of Mo-nyeng, who took the name of Mo-nyeng Men-ta-ra. He claimed to be descended from the old royal family of Pagan and the Shan ruler of Peng-ya, Nga-see-sheng. In his reign Burma was invaded by the kings of Pegu and Toungoo, but after they had captured Prome peace was made, and Bya-ngya-ran-khek married a daughter of the Burman sovereign. The Burman king died in 1439, the Peguan in 1446.

Mo-nyeng Men-ta-ra was succeeded by his son Meng-re-kyaw-swa, who deposed Meng-saw-oo, king of Toungoo, and replaced him by a Shan named Ta-ra-bya. He died after a three years' reign, and was succeeded by his son Thee-ha-pa-dee. This king defeated a large Chinese army at Koung-toon, a few miles south of Bhamo, in 1444.

Meng-re-kyaw-swa of Burma, 1439

Thee-ha-pa-dee or Bhoo-reng Na-ra-pa-dee of Burma, 1442

south of Bhamo, in 1444

On the death of Bya-ngya-ran-khek of Pegu in 1446, his son Bya-ngya-kheng of Pegu, kheng escaped to Burma, where he was hospitably received and remained till he succeeded in 1453.

In 1454 Bhoo-reng Na-ra-pa-dee had a friendly interview with A-lee-kheng, called King of Arakan. From 1453 onwards he was engaged in wars with Toungoo and with the Shan, and in 1468 died at Prome. He was

succeeded by his eldest son Bhoo-reng Ma-hee-thoe-ha-thoo-ra, who during a reign of twelve years was chiefly occupied in preserving his authority in Toungoo, in quelling outbreaks amongst the Shans, and keeping his rebellious brother in order at Prome

Doo tie-ya meng khoung of Burma, 1480 He was succeeded in 1480 by his son Doo-tie-ya-meng-khoung

The A-lee-khyeng mentioned above was a Muhammadan sent by the king of Bengal with a force to restore the rightful sovereign to the throne of Arakan He proved faithless, and usurped the government of the country

Na ra miet hla of Arakan He was later on attacked from Bengal and restored killed, and Na-ra-miet-hla was restored, but as tributary to Bengal, and from this time the coins of the Arakan kings bore on the reverse their names and titles in the Persian character

Bya-ugya-ran-khek of Pegu died in 1446, and was succeeded by his

Bya-ugya wa-roo of Pegu, nephew Bya-ugya-wa-roo His cousin Bya-ugya-kheng, assisted by Boo-reng Na-ra-pa-dee, ascended the throne, and died in 1453 He was succeeded by his cousin Hmaw-daw. Hmaw-daw put to death every member of the royal family on whom he could lay hands, and was himself killed after a reign of seven months

On his death Saw-bo-me, sister of Bya-ugya-ran-khek, was raised to the

Saw bo-me, queen of Pegu, throne amidst the rejoicing of all the people She had been married to the king of Burma, but, being

dissatisfied with her position, had fled to the court of her brother at Pegu She received congratulations from the neighboring potentates, amongst others the rulers of Ceylon and Bi-ya-na-gra-ran (Vizianagram?) The queen reigned wisely, and the country had peace A monk, who assisted her to escape from Ava, became layman, married her daughter, and was declared crown prince He ruled the country from Pegu, and on the queen's death at Rangoon in 1457 he succeeded her and assumed the title of Dham-ma-zee-dee

Dham ma zee-dee of Pegu, He is celebrated for his wisdom and for his intercourse with foreign countries, having received embassies from China, Siam, Ava, and Ceylon In his reign the country to the east bank of the Salween was added to the Pagan empire He died in 1491

When Dhoo-tie-ya-meng-khoung, who assumed the title of Thoe-ra-

See thoo ngya of Toungoo, thoo-dham-ma-raza, ascended the throne of Burma in 1480, the ruler of Toungoo was See-thoo-kyaw-

hteng He died in 1481, and was succeeded by See-thoo-nya This king was put to death by his nephew in 1485, who succeeded him Toungoo was now recognised as independent During his reign the country was invaded by the Talangs under Bya-ugya-ran, who succeeded his father Dham-ma-zee-dee in 1491 The Talangs were defeated

Dhoo-tie-ya-meng-khoung died in 1581, and was succeeded by his second

Ma ha-ra za thee pa dee or son Ma-ha-ra-za-thoe-pa-dee In his reign the Saw-Shwe nan sheng nara pa-dee of bwa of Mo-ngyeng rebelled Prome declared

Burma 1501 herself independent, and with Toungoo attacked him, but were defeated, and finally the troops which he sent against the Saw-bwa of Mo-ngyeng being utterly defeated, the whole country became

The han bwa of Burma, 1526 in a state of rebellion He was killed in 1526 during a second irruption of the Mo-ngyeng

Shan The son of the Mo-ngyeng chief became king of Burma

Ta-ka-rwot-lee of Pegu, 1526 Bya-ugya-ran of Pegu died in the same year, and was succeeded by his son Ta-ka-rwot-lee

In 1580 Meng-gyee-ngya of Toungoo died, and was succeeded by Meng-Meng ta-ra-shwee-htee of ta-ra-shwee-htee, who subsequently conquered Pegu and Ava
Toungoo, 1580

At this period the Burman and Talaing dominions were divided into four independent kingdoms, Burma, governed by the Shan Tho-han-bwa, Prome by Bhoo-reng-huwe, Toungoo by Meng-ta-ra-shwee-htee, both of Burman-Shan descent, and Pegu by Tu-ka-rwot-bee.

Toungoo had for many years been the resort of the Burmans, who escaped at each successive usurpation at Ava, and thither fled numbers of Buddhist monks when Tho-han-bwa attempted a general massacre of their order. Both people and rulers became more thoroughly Burman than the rest of Burma, and the king of Toungoo thus became known to Europeans as the king of the Burmans.

The first European* who visited Burma was Marco Polo, who came via Yunnan, and speaks of the very great and noble city of Amien, capital of the province of Mien, and which, according to him, was subject to the great Khan. He must have arrived shortly before the murder of Kyaw-swa.

In 1430 (circa) Nicolo di Conti landed in Arakan, proceeded to Ava, and thence down the valley of the Sittoung to a port called Xeythona, supposed to be Tha-htoon.

The next traveller is Athanasius Nitikin, a Russian, and there were none of importance till in 1519 the Portuguese Antonio Correa concluded a treaty with the king of Pegu at Martaban. They all describe the Peguan king as of great power and wealth, and Pegu as a city of great magnificence.

About this time Portuguese adventurers found their way into the armies of the contending sovereigns, and fought for whoever paid them best. The king of Arakan was now fully occupied in keeping his country quiet, the kingdom of Ava was in the utmost disorder, and Ta-ka-rwot-bee, who ascended the throne of Pegu in 1526, gave himself up to pleasure.

Meng-ta-ra-shwee-htee or Ta-beng-shway-htee, who had succeeded to the throne of Toungoo in 1530, besieged Pegu in 1534. Being unsuccessful, he invested it again the following year, but the garrison had been reinforced by some Muhammadan and European adventurers, and he was again foiled. In 1536 he again invaded the country, defeated the king in the plains of Kaw-ke-ya, and, though unsuccessful in his attempt on Pegu, captured Rangoon, Bassein, Myoung-Mya, and other fortified places in the delta of the Iriawaddy.

The next year the Toungoo monarch again attacked Pegu. Ta-ka-rwot-bee enlisted the services of Herdmand de Morlas, but the Peguan forces were defeated and Morlas slain. The Talaing were again defeated, and Ta-ka-rwot-bee fled to Prome. Ta-beng-shway-htee took Martaban, and then moved against the combined forces of Prome and Ava, which were defeated. He also defeated an Arakanese force which attempted to raise the siege of Prome. He had some Portuguese to help him, but he does not appear to have had much respect for them, as on one occasion he put to death 200 who had allowed an advanced work to be captured. Eventually Prome was taken, and, according to the Portuguese account, the queen was publicly whipped and delivered up to the lusts of the soldiers till she died. The young king was tied to her dead body and cast into the river. The same was done to 300 gentlemen after stakes

* Yule's *Marco Polo*, vol. II, page 91. This city is supposed to be Pagan, about lat 21°

were driven through their bodies. The king now appointed a brother of Bhoo-reng-Noung governor of Prome, and returning to Pegu was consecrated king.

When Tho-han-hwa was defeated, he abandoned the king of Prome and returned to Ava. He was murdered by his Burman subjects in 1542-43, and Koon mahing ngay of Ava, was succeeded by the Saw-bwa of Oou-boung, Koon-mhaing-ngay. He attacked Pegu, and the governor of Prome shut himself up on the town being invested. The victorious troops of Ta-beng-shway-htee raised the siege and advanced as far as Ava. The whole country as far as Pagan was annexed.

Ta-beng-shway-htee was now consecrated emperor, the rulers of Prome, Ta-beng-shway-htee, Toungoo, and Martaban doing homage. The crowned emperor, successful general Bhoo-reng-Noung was declared crown prince.

About this time the king of Arakan died, and was succeeded by the heir-apparent. The brother of the deceased king, who was governor of Sandoway, being dissatisfied, applied for aid to Ta-beng-shway-htee. The emperor invaded Arakan, and compelled the king,

Ta-beng-shway-htee invades Arakan, and compels the king to become his vassal.

Dham-ma-rit, to become his vassal.

Matters in Siam being in some confusion, the emperor determined on invading it. Bhoo-reng-Noung was in command of the Talaing army, in which were some Portuguese.

Invades Siam, 1539. under the pirate Iago Soarez de Melo. The forces crossed to Moulmein and entered Siam *via* Mya-wad-dee on the Thoun-g-yeng, thence they marched to the Mei-num, from which they descended to Ayodhia, the capital, taking several towns. They failed to take the capital, but the Talaing army retreated in order, carrying away captive the son-in-law of the king of Siam.

At the end of 1540 an insurrection broke out in Pegu, and although it was suppressed, the country continued in a very unsettled state, and in 1550 Ta-beng-shway-htee was

Is killed, 1550.

killed. This great soldier reigned for twenty years, during which time he conquered and annexed Pegu, Prome, and the whole valley of the Irrawaddy as far as Pagan, and invaded, not unsuccessfully, Arakan and Siam. Rebellion

Bhoo-reng-Noung of Toungoo (1550) or Sheng-hpyoo-mya-sheng Meng-ta-ra-gyet.

now broke out everywhere, and Bhoo-reng-Noung retired to Toungoo, which he besieged. After five months' siege it surrendered, and he was consecrated king, assuming the title of Sheng-hpyoo-mya-sheng Meng-ta-ra-gyet. He reconquered Pegu, Prome, and other places that had revolted, and killed Tha-mien-hyaw. Sheng-hpyoo-mya-sheng followed in the footsteps of his predecessor, and, continuing a "reckless" career of conquest, raised the kingdom to a height of dazzling but false prosperity.

In 1554 he captured Ava, and making his brother Meng-rai-tee-thoo governor, with the title of Tha-do-meng-tsaw, he sent the king See-kyau-hteng to Pegu. The country

to the north of Ava was overrun and subdued, and leaving a garrison in Ava the conqueror returned to Pegu.

The Shan Saw-bwa in the north were in a continual ferment, and the king of Won-boung applied for assistance. The emperor having left an army in Toungoo under his brother, with another, in person, proceeded to Sam-penago. With this as a base he overran Won-boung, Mo-miet, Mo-nyeng,

and Mo-goung. He then marched south-east and invaded Zeng-mai, which submitted. Leaving an army of fifty thousand men he returned to Ava

Invades Zeng-mai

The ruler of Laos now threatening an attack on the territory east of the Salween, reinforcements were sent under Ming-rai-kyan-hteng, who defeated the invader and annexed more territory towards the Me-kong

In 1563 Siam was invaded by a force collected from all parts of the empire. It crossed the Pong-loung mountains, and descending the Me-kong captured the Siamese capital, dethroned the king, and placed his son Bra-ma-heng on the throne as a tributary

Invades Siam, 1563

Zeng mai punished, 1565

Shortly after the offending ruler of Zeng-mai was attacked and made prisoner

In 1568 there was another expedition into Siam, and in 1569 Ayodhya, the capital, was taken, and a Zeng-mai chief put on the throne, and the troops turned against Laos, but these operations were unsuccessful

In 1581 a grand expedition was organised against Arakan. The Burman and Talaing forces reached Sandoway, where they were entrenched, but before any advance was made, the emperor suddenly died in 1581 at the age of 66, and after a reign of thirty years. Caesar Frederick, speaking of the army of the time, says it consisted of elephants, horsemen, arquebussiers, and pikemen, the armour and weapons, except the arquebusses, which were excellent, are described as bad. There was daily ball practice, and the men were excellent shots. The cannon were good, and made of good metal.

Shong-hpyoo-mya-sheng left to his successor territories larger than any ever ruled before by any monarch in Burma. His son succeeded him under the title of Nanda Bhoo-reng, and declared his own son Meng-Keyit-swa crown prince. In his reign Siam revolted and was twice invaded.

Sheng hpyoo mya sheng dies 1581, and Nanda Bhoo reng succeeds
Siam invaded—1590 first time, 1593 second time

unsuccessfully, the crown prince being killed in the second. Mo-goung also rebelled.

From this time commenced the decadence of the Peguan empire. "Pegu was now exhausted, discontent was universal, and the emperor, suspicious of everyone, became wantonly cruel. The country of the delta became depopulated, and an attempt was made to drive down the people from the Upper Irrawaddy to till the fertile land of Pegu, but famine and plague raged, and there was no help."*

Siam invades Pegu

The king of Siam, taking advantage of these troubles, invaded Pegu, but retired on the approach of the emperor.

In 1596 an Arakan force under Meng-kha-moung, the king's son, occupied Arakan and Toungoo invade Pegu, 1596. Syriam, and two years later Pegu was invested by the combined forces of Toungoo and Arakan. The emperor finally surrendered and was put to death.

The king of Siam again invaded Pegu, and the king of Toungoo retired to his own kingdom. Siam made no attempt to annex Pegu, but retained Martaban and the country to the southward.

At this time Philip de Brito y Nicoti, a Portuguese adventurer, was made governor of Syriam by the king of Arakan. He revolted, and, with the assistance of the

do Brito made governor of Syriam.

Viceroy of Goa, seized and held the place in the name of the Portuguese king. He was taken prisoner and impaled by the king of Ava.

After the fall of the Peguan empire, the ruler of Ava, Ngyoung-ran-bhoora, being left at peace, tried to reduce his country into some order, but was soon threatened by an invasion, the rulers of Prome and Toungoo combining against him in 1597. The Prome king being murdered, the invasion fell through. Ngyoung-ran-bhoora died in 1601, and was succeeded by his son under the title of Maha-dhami-ma-raza.

This king took Prome in 1607, and made Toungoo tributary in 1610. It was he who conquered and impaled de Brito, and after this he was solemnly declared emperor at Pegu.

The great monarchy was thus re-established, but with the capital at Ava instead of Pegu.

The emperor took Tenasserim and annexed 1619 Zeng-mai, and in his reign English factories were established at Syriam, Prome, Ava, and Bhamo.

In 1655 the Chinese, in pursuit of Young-hlee, who had rebelled against the Emperor of China and taken refuge in Ava, invaded Burma, defeated

Meng-gyee-gyoo-goung of Ava, two Burmese armies, and laid siege to Ava, 1661 but retired. The emperor was dethroned by his brother in 1661, who succeeded him, taking the title of Meng-gyee-gyoo-goung.

Neither Burmans nor Talings had ever been able to retain their conquests long, so now the Burman Empire gradually fell to pieces. Each succeeding emperor was weaker than his predecessor.

Toungoo, Prome, and Pegu became independent, and in 1686 Siam regained possession of Tenasserim.

In 1740 the Talings, aided by the Siamese, took Ava, and the reigning monarch, Khoung-thit, was taken prisoner to Pegu.

The English had at this time a factory at Syriam, and this was burnt by the Talings when they took possession of the place, as the English had refused to assist them against the Burmans.

The Peguan king did not retain his conquest long. In 1754 one Oung-za-ya, who claimed to be a connection of the royal family of Burma,* revolted and took Ava, and defeated

the army sent by the Taling king. The Talings were again defeated near Prome. Oung-za-ya at once advanced south, and Bassein was abandoned on approach in 1755. Captain Baker, who was in charge of the English factory, received the Burman troops with confidence and asked for protection, which was granted. The main Peguan army was again defeated near Rangoon.

Oung-za-ya now declared himself king of Burma and Pegu, under the title of Aloung-bhoora (corrupted by Europeans into Alompra).

Alompra is the founder of the reigning dynasty of kings of Burma. He eventually subdued the Talings effectually, and conquered an empire which

* According to Fytche, Alompra was of very humble origin, and followed the calling of a hunter. When he revolted, he assumed the name of Oung-za-ya ("Victorious conqueror")—Fytche, vol. I, page 67.

The present royal family of Burma, who are descended from him, claim his connection with the ancient royal family of Burma, and the author of the *Gazetteer of British Burma* has also taken this view.

extended from China to Siam. In these wars the French and English had taken different sides, the English siding with Alompra. They were not, however, always true to their engagements with him *. In his reign the British Government were first brought into political relationship with the kings of Burma.

Makes a treaty with English. In 1775 Aloung-bhoora agreed to a treaty with the English, the terms of which were—

1st — Cession to the English of the island of Negrais in perpetuity

2nd — Cession of ground at Bassein to the extent of four thousand square cubits and more if required in perpetuity

3rd — Trade to be duty free

4th — The company to give one 12-pounder gun and 750 lbs of powder.

5th — The company to aid and defend the king of Burma against all his enemies, his majesty paying the expenses of the troops.

6th — The company not to assist the king of Tavoy

ENGLISH MASSACRED AT NEGRAIS

In 1759 all the British Officers in the factory of Negrais were murdered by the Burmans, but whether with Aloung-bhoora's sanction or not is not known.

Aloung-bhoora died in 1760 while invading Siam. He was succeeded

Aloung bhoora dies, 1860

Noung-daw gyee, 1761

by his son, the Sit-king-meng, who, owing to rebellions, did not obtain undisputed possession of his father's throne till 1761. He is generally known

as Noung-daw-gyee. This king refused to afford any redress for the massacre at Negrais, and refused to allow the English to return there, thus ignoring the treaty made with his father.

Noung-daw-gyee died in 1764 at Sit-kaung, and his brother, the Mye-

Sheng hpyoo-sheng, 1764

htoo-meng, mounted the throne and assumed the title of Sheng-hpyoo-sheng (Lord of the White Elephant).

Siam invaded and rendered tributary, 1766

In this reign Siam was successfully invaded and rendered tributary.

In 1767 a Chinese army invaded Burma, but was defeated with great slaughter. All those not killed were taken prisoners to Ava.

In 1775 Sheng-hpyoo-sheng died, and was succeeded by his eldest son

Bhoo-da-bhoora (1781) or Meng tara gyee

Seng-goo-meng, who was killed in 1781, in which year the sixth king of Aloung-bhoora's dynasty ascended the throne.

In 1783 Arakan was conquered. On the conquest many of the Arakanese fled to British territory.

In 1793 a Burmese force of 5,000 men entered British territory in Chittagong in pursuit of some marauders, and avowed their intention of remaining there till they had secured them. A British force under General Erskine was despatched against them, but no encounter took place. The Burmans retired, and the General having ascertained that the individuals were really guilty, handed them over to the Burmans.

MISSION TO THE KING OF AVA

The Governor General in 1795 despatched an embassy to the Burman king. Captain Symes was the envoy, and was treated with great insolence and indignity, and the only result of the mission was a permission to appoint a British Consul in Rangoon.

The following year Captain Cox was appointed Consul in Rangoon, and was treated with even greater indignity and grosser insult than Captain Symes.

* *Gazetteer of British Burma*, vol. I, pages 301 &

had been The Government of India took no notice of these gross insults, and Captain Cox remained in Rangoon subject to all sorts of indignities, for which no redress was demanded In 1801 another mission was sent, which was treated as before

Mission to Burma, 1801 In 1804 the mate and passenger of a British vessel were detained by the governor of Bassein, and an attempt made to get at the public despatches No notice was, however, taken of this outrage

Another mission was sent in 1809-10 under Captain Canning, and though better treated effected nothing The relations between the two countries were now very strained, and continued to get worse,—on the part of the Burmans increasing insolence and outrage, and of the British unaccountable forbearance, which to an Oriental would appear fear, were rapidly bringing matters to a crisis

King Bhoo-da-bhoora died in Amarapoora in 1819, after a reign of thirty-

Hpa gyee-daw, 1819 eight years Notwithstanding his crimes he was an able and prudent sovereign His grandson, the Pa-doung-meng, ascended the throne under the title of Hpa-gyce-daw The most important event in this sovereign's reign of eighteen years was the war which he waged with the British The causes of this war arose from a long series of events from about 1774 The Burmans, having conquered Arakan and Manipur, had been constantly employed in keeping these countries in subjection In 1822 Arakan had revolted, and, being furnished with arms by the British, had for a time the best of it, but large reinforcements arriving under Maha Bandoola, they were forced to retreat into British territory Attacks on British villages now commenced, and an island on the Brahmaputra, on which the British flag was flying, was claimed by the Burmans, the flag thrown down, and a force collected to support their claim This was not resented by the British, but these wanton attacks made it necessary for the Government to take steps to protect its north-east frontier, and with this object Cachar was taken

Burman aggressions under British protection, so that any advance of the Burmans from Manipur could be checked The aggressions on the Chittagong frontier still continued, and in September 1823 the gaid on the island of Shopaice was attacked, some killed and wounded, and the remainder driven off A remonstrance addressed to the king of Burma elicited no reply, and in October 1823 hostilities commenced, and on the 5th March 1824 war was declared, and carried on

War with Burma declared 5th March 1824 under the direction of Sir Archibald Campbell The treaty of Yandaboo was signed on the 24th February 1826 The following are the principal articles of

the treaty —

- I —Perpetual peace and friendship between the Hon'ble Company and the king of Ava
- II —The king renounces all claims on Assam and its dependencies, and also with the contiguous petty States of Cachar and Jaintia With regard to Manipur, it is stipulated that, should Ghumbeer Singh desire to return to that country, he shall be recognised by the king of Ava as Rajah thereof
- III —To prevent all future disputes between the two great nations, the British Government retain the conquered province of Arakan, including the four divisions of Ramree, Cheduba, and Sandoway
- IV —The king of Ava cedes the provinces of Yeh, Tavoy, Mergui, and Tenasserim, with the islands and dependencies appertaining thereto

- V —The king to pay a crore of rupees in proof of his sincere disposition to maintain the relations of peace and amity between the two nations
- VI —Accredited ministers with an escort of 50 men shall be allowed to reside at the court of each, and a commercial treaty shall be entered into by the contracting powers
- VII —The property of British subjects who may die in the king's dominions shall, in the absence of legal heirs, be placed in the hands of the British Resident or Consul
- VIII —The king of Ava to abolish all exactions upon British ships or vessels in Burman ports that are not required for Burman ships in British ports

[Note—Nearly all of the foregoing is taken from the *Gazetteer of British Burma*]

For some years the relations of peace continued undisturbed, and so long as the king who had signed the treaty made in 1826 remained on the throne, no serious cause of offence was given. In 1837, however, he was deposed by his brother, who entertained the strongest dislike for the British, and exhibitions of ill-feeling quickly followed, acts of violence being eventually committed on British ships and against British seamen, who had proceeded to Burmese ports in the exercise of their calling. Officers deputed to the Governor of Rangoon to call for an explanation were insulted, and finally the Burmese Government were called upon to furnish a moderate compensation for injuries inflicted, and an apology from the Governor of Rangoon for his bad behaviour to the officers sent to him to seek redress. The Burmese Government obstinately refused even the trifling sum required, or the expression of regret asked for.

The second Burmese war followed, and, as in the former, though success was varying, the British finally triumphed. The city of Pegu, the capital of that portion which, after having been captured, had again passed into the hands of the enemy, was recaptured and retined, and the whole province of Pegu was by proclamation of the Governor General declared to be annexed to the British dominions.

The king refused to sign any treaty, and it was not insisted on,* the British Government being content with the tacit acquiescence of the king of Burma without such documents, but its intention was declared that any active demonstration of hostility would be followed by retaliation. Thus ended the war of 1853, unfortunately brought to a premature close. On neither occasion did we take due advantage of our conquest. In 1826, and again in 1853, it would have been an easy task to have reduced the king of Burma to the condition of a feudatory prince, maintained by a subsidiary alliance, like the princes of India.

The loss of Pegu reduced the Burman empire, which had once commanded the greater part of the eastern coast of the Bay of Bengal, to the condition of an inland power shut up in the upper valley of the Irrawaddy.

The king of Burma soon grew weary of his isolation. At the same time that he felt keenly the loss of Pegu—for he had derived a larger revenue from this province than from any other in his kingdom—still more bitterly must the loss have been felt by all the “eaters of revenue” of the Pegu township.

* Lord Dalhousie, the Governor General, declaring that any treaty with such a potentate would be utterly useless.

Accordingly the recovery of Pegu became a passion with the Burmese court, but war they had had enough of, and no Burmese warrior could be found bold enough to suggest it. Therefore it was resolved to work on the generosity of the British Government. About eighteen months after the conclusion of the war a complimentary mission arrived at Calcutta from the king of Burma. The envoys brought presents for the Governor General, and requested that the province of Pegu might be restored to their royal master. Lord Dalhousie treated the request as utterly preposterous, and his answer through the interpreter (Major Phayre) was—"Tell them that as long as the sun shines in the heavens the British flag shall wave over Pegu." In 1856 the present Major-General Sir Arthur Phayre proceeded to Amarapoora on a mission to the king. The main object of the mission was to not only establish friendly relations, but to make another attempt to conclude a definite treaty with the king.

The king objected to any treaty which should recognise the loss of Pegu, and although friendly relations were established, no treaty was then signed. In 1862 a treaty was concluded, but it did not work, but in 1867 a treaty was concluded in which all the points denied to Colonel Phayre were conceded to Colonel Fytche. The king abandoned all his monopolies, excepting earth-oil, timber, and precious stones.

Nothing of importance occurred until the year 1874-75, when the relations between the two Governments were considerably strained, owing to aggressive acts of the Burmans in Karennie territory. After much remonstrance it was found that, while promising compliance with the wishes of our Government, they still continued their annoyances on the frontier. Therefore the king of Burma was warned that any further such aggressions would be considered as an act of unfriendliness, which might alter the position of the British Government with regard to Western Karennie.

During the greater part of the year 1878-79 our relations with Upper Burma were much strained, and trade was injuriously affected in consequence. In April the Political Agent at Bhamo was murdered by one of the escort. During the months of August and September there were frequent rumours of the decease of the king. He had practically ceased to exercise any authority before the 12th September, on which date the party in power succeeded in placing nearly all the princes of the blood royal under arrest. The Nyoung-yan and Nyoung-oke princes, who escaped to the Residency, received protection, and were subsequently sent in safety to Calcutta. Meantime, on the 1st of October, the king died, and the Theebaw prince succeeded to the crown without any visible opposition.

In February over sixty relatives of the late king, male and female, were murdered in the palace and prisons, and although the British Resident remonstrated, it was not known when a fresh batch might be massacred, and there was a general feeling of insecurity. Trade was paralysed. The situation in Burma had assumed a really serious aspect. The king might attack us in one of his drunken fits, if not first attacked by us, but although a detachment of 2,000 men, European and Native, and a small naval brigade from Her Majesty's ship *Swan*, had been despatched to the frontier, it seemed to be the policy to wait for the movement of the Burmese troops massing at Myinhla, some 50 miles above our frontier. By the middle of April several steamers were in readiness at Thayetmyo to convey our troops beyond the frontier in the event of war. They were not, however, moved.

At length, in October, the Resident decided on leaving Mandalay. On the 6th of October he sent a circular to the various British residents informing

them of his intention, and offering to take them with him. Nearly all availed themselves of the opportunity, leaving their luggage behind them.

At the end of October a "Woondouk" (Minister or Secretary of War) was sent as an envoy to the Viceroy. He was detained at Thayetmyo by orders of the Chief Commissioner, pending the receipt of instructions from the Viceroy. These orders reached Thayetmyo in December, and were as follows —

"The Viceroy is seriously dissatisfied with the position and treatment of our Resident lately at the Burmese court, such treatment being altogether inconsistent with the profession of friendship of the Burmese Government and with ordinary diplomatic courtesy.

"It appears then altogether incongruous and premature for the king to send a complimentary mission, or for him to assume that it can be received in a friendly or honourable manner by the Government whose representative has been treated with habitual discourtesy at Mandalay."

The ambassador was then told that he could refer to the court of Mandalay for additional instructions, and in the event of his getting these, and disclosing an intention to make substantial overtures, the Chief Commissioner would receive and deal with such communications, otherwise the ambassador could not be received.

Among other executions reported, in addition to those first noted, are those of five unfortunate princesses recently murdered for corresponding with the Prince Nyoung-san.

These proceedings produced, besides the panic already existing, such a state of suspicion that no one felt safe. Many of the surrounding tribes revolted.

In 1881 the Shan States from Thong-zet, north-east of Mandalay, to Mo-hyay on our frontier had thrown off the Burman yoke, and expelled all Burman officials from their country. They defeated successive Burman armies sent against them, and on the last occasion took a whole force prisoners. These took Shan wives and settled down quietly in the country of the people whom they had come to conquer. It is not in the nature of a Burman to despair or long to repine at past sufferings or losses, and these vanquished warriors are now most likely as happy in their new country and amongst their newly-made friends and relations as they were in their own villages.

In 1880-81 peaceful relations continued between the British and Burmese Governments. Although no British Resident was stationed at Mandalay, direct communication was maintained without difficulty with the court of Ava. In June the Nyoung-oke prince, one of the refugee princes who quitted Mandalay shortly after the death of the former king, made an attempt at insurrection, but his operations were feeble, and merely caused some temporary disturbance on the frontier. The prince made his escape into British territory, where he was detained and removed to Calcutta. Towards the end of the year the Burmese Government began to establish monopolies of various articles of produce, and added to their number during the year 1881, when there was hardly an article of trade that was not monopolised. Representations were addressed to the Burmese Government on the subject of the injury done to trade by the creation of these monopolies. The result of these was that an envoy was sent down to visit the Viceroy when he visited British Burma in 1881.

He arrived too late to see Lord Ripon, but it was arranged that an embassy should proceed to Calcutta and settle the terms of a treaty of commerce. They did not arrive in Calcutta until after the Viceroy had proceeded

to Simla, whither they accordingly followed him. They remained at Simla till September, and at length left without concluding a treaty.

FIRST BURMESE WAR

The first Burmese war commenced on 5th March 1824 and lasted till 24th February 1826, when the terms of peace we imposed were finally settled and signed.

"The events which led to this war were as follows. Animated by the reaction which suddenly elevated them from a subjugated and humiliated people into conquerors and sovereigns, the era of their ambition may be dated from the recovery of their political independence, and their liberation from the temporary yoke of the Peguans was the prelude of their conquest of all the surrounding realms."* Shortly after their insurrection against Pegu, the Burmans became the masters of that kingdom. They annexed Arakan, Manipur, Tenasserim, and Assam, and established themselves through the whole of the narrow, but extensive, tract of country which separates the western provinces of China from the eastern boundaries of Bengal. Along the western part of this territory they threatened the open plains of British India, and only awaited a plausible pretext to invade them.

The imperious disposition of the court of Ava was manifested at a very early period, and a barbarous massacre of British subjects on the island of Negrais was authorised by

Burmese insolence

Alompra. This was never disavowed, nor excused by his successors, nor resented by the British Government of India.

Shortly after the conquest of Arakan, a Burmese army entered our territories in pursuit of robbers, without any previous intimation of their purpose, whilst a force of 20,000 assembled at Arakan to support the invasion.*

The advance of a British detachment under Colonel Erskine and the prudence of the Burman commander prevented hostilities. On this Colonel Symes was despatched on a pacific mission to the court of Ava, but his reception there, as described by himself, clearly shows that the king considered it rather as a tribute to fear than as an advance towards liberal conciliation and civilised intercourse.

In 1811 the Arakanese revolted, and recovered the whole province with the exception of the capital. Their success was, however, transient, and the Burmans soon recovered possession of the country. Many of the insurgents took refuge in Chittagong, and the refusal of the British to deliver them up to the barbarity of the Burmans was a source of deep and long-cherished resentment to the court of Ava.

In 1818 a large Burmese army was sent to Assam to avenge the murder of the Rajah, an ally of the Burmans. His brother Chandra Kant was elevated to the throne, but shortly after misunderstandings arose between the Assamese and Burmans, and although the Assamese at first suffered reverses in the fighting which ensued, they were ultimately victorious.

Their success was not of long duration. Early in 1822 considerable reinforcements were sent from Ava under Meng-hee-maha

Meng hee-maha Bandoola.

Bandoola, an officer of rank and military ability.

This is the first appearance on the scene of Maha Bandoola, the greatest Burmese general ever opposed to the British.

On the defeat of Chandra Kant, the Burmese general, anticipating that he would take refuge in British territory, wrote to inform the officer

commanding that if this should occur he had orders to take him out of it by force *

The Burmans now established a chief of their own country as ruler of Assam, and it was not long before the amicable relations which had existed, chiefly through the forbearance of the British Government in not exacting retribution for the injuries offered to its subjects, were disturbed.

An island in the Brahmaputra, on which the British flag had been erected, was claimed by the Burmans, the flag thrown down, and an armed force collected to maintain the insult.

Burmese aggression, 1822

It does not appear that this conduct was ever resented †

The threatening attitude of the Burmans now rendered it incumbent on the British Government to take such measures as were practicable for the

Cachar taken under British protection

defence of the eastern provinces. With this view they determined to take the principality of Cachar under British protection, by which arrangement they were enabled to occupy the principal passes into the lowlands of Sylhet, and thus effectively oppose the advance of the Burmans from the district of Manipur, which they had a short time previously reduced to their authority.

The insolence of the Burmese authorities in Assam and the adjoining countries were not restricted to menaces, but repeated instances of aggressions distinctly marked either their intention of provoking hostilities or their indifference as to their occurrence. The chief objects of these acts of violence were the elephant hunters in the Company's employ, whom the Burmans repeatedly seized and carried off, without communicating with the local authorities.

In January 1823 a boat laden with rice having entered the nullah which is on the British side of the Naaf was followed by an armed Burmese boat which demanded duty. As the demand was unprecedented, the Mugs, who were British subjects, refused payment, on which the Burmans fired upon them, killing the steersman, and then retired. This outrage was followed by the assemblage of armed men on the Burmese side of the river for the purpose of attacking the villages on British territory, and to provide against such a contingency, as well as to protect the boats trafficking on the Company's side of the river, the military guard at Tel Naaf was strengthened from 20 to 50 men, of whom a few were posted on the adjoining island of Shahpuri. On this the Burmese police officer urged the Magistrate of Chittagong to withdraw the guard, and intimated he had authority to declare that, if the detachment were not recalled, the consequence would be a war between the two countries.

On the night of the 21st September 1823 a body of 1,000 Burmese

Attack on British guard at Shahpuri, 1823

under the Rajah of Ramree landed at Shahpuri, attacked the British post, killed three and wounded four men, and drove the rest off the island.

The Rajah of Arakan himself, in a menacing letter, reported this act to the Bengal Government, stating that, unless the British Government submitted quietly to this treatment, it would be followed by the forcible seizure of the cities of Dacca and Moorshedabad. In order to avoid till the last moment the necessity of hostilities, the Government of Bengal determined to afford the court of Ava an opportunity to avoid any collision. This intention, however, was misunderstood by the Burmans as a pusillanimous attempt to deprecate their resentment ‡

* Wilson's *Burmese War*, page 7

† Wilson's *Burmese War*, page 8.

‡ Wilson's *Burmese War*, page 11

In the meantime the island in dispute was reoccupied by two companies of the 20th Regiment Native Infantry, and a stockade constructed, on which were mounted two 6-pounder field-pieces. One company was stationed at Tek Naaf, and the *Planet*, armed vessel, and three gunboats, each carrying a 12-pounder carronade, in the Naaf.

Although no resistance was offered by the Burmans to the occupation of the island, it soon became evident that the result would be war between the two nations. It was known also that the Burmans were collecting troops both in Assam and Arakan, and menaced an attack upon the different exposed points of the Company's frontier. In view, therefore, to the impending occurrence of hostilities, His Excellency the Commander-in-Chief was requested to provide, as he might think most advisable, for the defence of the frontier as well as for the system of offensive operations that might be expedient should war become inevitable.

In reply the Commander-in-Chief suggested that for the defence of the Eastern Frontier three brigades should be formed, to consist of 3,000 men each, to be stationed at Chittagong, Jamalpore, and Goalpara, and a strong corps of reserve to be posted under a senior commanding officer at Dinagepore, to whom all communications should be made, and from whom all orders should be issued. His Excellency also urged the formation of an efficient flotilla on the Brahmaputra towards Assam and in the vicinity of Dacca. The course of operations on the frontier he recommended should be strictly defensive, whilst the offensive system was an attack from sea on such points of their coast as should offer the best prospect of success. Arrangements were therefore adopted for carrying on the war upon the principles recommended.

In the end of October the Burmese were reported to be concentrating their troops in Assam for the invasion of Cachar. The Burmans were warned not to molest this State, which was under British protection, and a force also advanced from Dacca to Sylhet. This consisted of part of the 1st Battalion 10th (14th) Native Infantry, 3 companies 2nd Battalion 23rd (46th) Native Infantry, 4 companies Rungpore Local Corps, and a few guns.

Detachments of this force under Captains Johnstone and Bowe and Major Newton were posted at Bhadiapur, Jatrapur, and Talang in advance of the Sylhet frontier, and covering that station from an attack from either of the directions in which it was menaced.

In the early part of January a force of about 4,000 Burmans and Assamese Burmese invaded Cachar, advanced from Assam into the province of Cachar to the foot of the Bherteka Pass and began to stockade themselves at Bikrampore.

Major Newton, Commanding on the Sylhet Frontier, determined to concentrate his detachment at Jatrapur,* and thence advance against the Burmans before they should have time to complete their entrenchments.

Accordingly the British force marched at 2 A.M. on the 17th January, and at daybreak came within sight of the stockade, whence a few shots were fired on the advance guard.

The Burmese position extended along the villages at the foot of the hill. They were covered by the huts, bushes, &c., and in a close and difficult country, and on their right they had a stockade on the banks of a steep nulla occupied by about 200 men. The

* A Cachar village about 6 miles beyond the Sylhet frontier.

attack was made in two divisions,—the southern face of the stockade being assaulted by Captain Johnstone with part of the 23rd Regiment and Rungpore Light Infantry, and the enemy's line in the villages being attacked by Captain Bowe with part of the 10th Regiment, the whole under the command of Major Newton. This last was immediately successful, the greater part of the enemy (supposed to be Assamese) flying to the hills at the first fire. Captain Bowe then wheeled his force to the attack of the stockade, which was making a brave resistance against Captain Johnstone, and in a short time it was carried by assault. The Burmans lost about 100 men, whilst the British loss was only 6 sepoy's*.

Subsequently to the action of the 17th January, Major Newton with the force under his command returned to Sylhet, withdrawing all the troops from Cachar. The Burmans then advanced to Jatrapur, about 5 miles east of the frontier and 8 miles from Bhadrapur, where the two divisions from Assam and Manipur effected a junction, and erected stockades on either bank of the Surma, connecting them by a bridge across the river. Their united force amounted to about 6,000, of whom 4,000 were Assamese and Cacharees. A detachment of 2,000 more was posted at Kila Kandy in the south-east quarter of Cachar.

The main body of the Burmans proceeded to push their stockades on the north bank of the Surma to within 1,000 yards of the British post at Bhadrapur. Here Captain Johnstone commanded with a force consisting of 4 companies of the 10th (14th) Native Infantry, 1 company 23rd (48th) Native Infantry, and a small party of Rungpore Local Corps.

As the Burmans had commenced the construction of five separate stockades on most advantageous ground, Captain Johnstone deemed it advisable to dislodge them before the works were finished.

Assault of the 18th February 1821. For this purpose he directed Captain Bowe with a part of the 2nd Battalion 23rd Regiment Native Infantry and a party of the Rungpore Light Infantry to cross the river and attack them. Captain Johnstone thus reports the action:—

"On reaching the first stockade, the enemy fired upon the leading sections, who ascended the height and instantly drove the enemy at the point of the bayonet from the stockade, and rapidly followed them up without giving them time to rally, till every stockade was carried in the same gallant manner. My instructions from Mr Scott† being not to commence firing unless much resistance was made, prevented the enemy's loss from being so great as it otherwise must have been. With the stockades the enemy abandoned a number of jingals and muskets, and the whole of their ammunition."‡ In this action the loss on our side was one jemadar and a number of men wounded. The loss of the Burmans is not known.

The Assam division of the Burmans fell back upon the Bherdeka pass and the Jetingh river, whilst the Manipur force stockaded itself at Doodpatlee.

With the view to expel the former of these detachments altogether from Cachar, Lieutenant-Colonel Bowen, who had now assumed command, marched in pursuit of the retreating enemy.

They were found under the Bherdeka pass, strongly posted in two Burmese position, 17th February stockades on the left bank of the river, the passage of which, at the only place where fordable, was

* Report of Major Newton and Wilson, page 23.

† The Agent to the Governor General.

‡ Report of Captain Johnstone-Wood, page 22.

completely commanded by one of them. The position, naturally strong, had been made by the enemy and the late heavy rains so difficult as to appear almost impracticable. The men were therefore crossed on elephants under cover of the fire of the light company 10th Regiment, but after a division of the force had crossed, it was found necessary to make a detour through the thick jungle. The passage to the north-east angle of the stockade being at last effected, the troops formed and carried it with the bayonet. The enemy fled to the hills.*

There still remained the Manipur division to be expelled, and to effect this Colonel Bowen marched against their position at Doodpatlee, which proved stronger than any yet assailed.

The Burmans were stockaded on the north bank of the Surma river.

Burmese position, 21st February. Their rear rested on steep hills. Each face of the entrenchment was defended by a deep ditch about 14 feet wide. A fence of bamboo spikes was constructed along the outer edge, and the approach on the land side was through jungle and high grass. After the post had been reconnoitred, the three field-pieces with the detachment were brought to bear on it with considerable effect.

The commanding officer then directed the assault to be made on the western front. The Burmans remained passive until the troops advanced to the spikes, when they poured upon them a destructive and well maintained fire, which checked their advance, although they kept their ground. After being exposed to this fire for some time, and as it appeared with no hope of advantage, the attempt was abandoned. The force was withdrawn to Jatrapur. Our loss was severe, being—

1 European officer killed
2 European officers wounded dangerously

1 European officer wounded slightly
155 men killed and wounded

The enemy's number was about 2,000, including cavalry, and Colonel Bowen in his report says—"They fought with a bravery and obstinacy which I have never witnessed in any troops." Their loss could not be estimated, but must have been severe.

On the 27th February Colonel Innes joined the force at Jatrapur with 4 guns and the 1st Battalion 19th (38th) Regiment and assumed command. In the meantime the Burmans retreated from the position at Doodpatlee and fell back to Manipur.

While these events were taking place in Cachar, the occurrences in the Burmese outrage on a British officer at the southern extremity of the frontier partook of the same character, and indicated the determination of the court of Ava to provoke hostilities. Early in January the detachment at Shalipura was withdrawn on account of the unhealthiness of the place, and the pilot vessel *Sophia* was ordered to join the gunboats off that island as a substitute for the troops that had been removed. About this time four persons, said to be deputies from Ava, arrived and invited the officer commanding *Sophia* to a conference. He landed, and was at once seized along with an officer and seaman who accompanied him. These were kept prisoners in Arakan till the 13th February, when they were sent back to Mungdoo.

As the two States might now be said to be at war, the British Government on the 5th of March 1824 officially declared war. War being now declared, measures were at once taken for its prosecution upon the principles adopted, with the concurrence of the Commander-in-Chief.

As Cachar was already clear of the Burmans, it appeared only necessary to dislodge them from Assam, and the invasion of Arakan was not immediately proposed. In Sylhet and Chittagong therefore a strictly defensive line of conduct was pursued, Colonel Innes with his brigade remaining at the sadder station of the former, and Colonel Shapland commanding at the latter.

The Chittagong force consisted of—

- 4 companies 13th (37th) Regiment Native Infantry
- 5 companies 2nd Battalion 20th (40th) Regiment Native Infantry.
- 1st Battalion 23rd (43th) Regiment Native Infantry, and
- Provincial Battalion

A local corps or Mug levy was also raised, and the whole amounted to about 3,000 men. Of these a detachment under Captain Noton, consisting of five companies of the 45th Native Infantry, with two guns, and details from the Provincial battalion and Mug levy, was left at Ramoo to check any demonstration on the side of Arakan. It was in Assam, however, that first hostilities occurred after the war was proclaimed.*

The Assam force stationed at Goalpara under command of Brigadier McMorine consisted of—

- 7 companies 2nd Battalion 23rd Native Infantry,
- 6 companies Rungpore Local Corps,
- Dinapore Local Corps,
- A wing of Chumparun Local Corps,
- 3 brigades of 6 pounders,

and a small body of irregular horse, besides a gunboat of flotilla on the Brahmaputra

This force marched from Goalpara† on the 13th March 1824. The

Operations of the Assam force route lay along the bank of the river, occasionally through thick jungle and long grass. A number of small rivulets and ravines intersected the road, and heavy sand or marshy swamp rendered the march a severe one.

All the supplies were carried on elephants or in boats. On the 28th the force arrived at Gauhati, where the Burmans had erected strong stockades, but evacuated them on the approach of the British. The Assamese displayed the most favourable disposition towards the British, but their unwarlike character, scanty numbers, and reduced means rendered their co-operation of no value, and the uncertainty of support and doubt of the capability of the

country to maintain so large a force, as well as the want of accurate information of the state of the roads, induced the commanding officer to pause at Gauhati, and at one time to abandon all thoughts of prosecuting the campaign further in the season, notwithstanding the fairest prospect offered of expelling the Burmans altogether from Assam, even by the partial advance of the British force.

The Burmans, who had retreated to their chief stockade at Moura Mukh, finding that they were not pursued, returned to Kahlur.

Captain Richards was now detached from Gauhati with five companies of the 23rd and the flotilla, and having joined the Commissioner's escort at Nowgong, he advanced to Kahlur‡. The Burmans deserted their stockade and retired to Ranggher, about 5 hours' march distant. A small party of the enemy having returned to reoccupy the Haulbur stockade, were surprised by Lieutenant Richardson with a resale of horse and a company

* Wilson's *Burmese War*, page 18.

† Goalpara on the left bank of the Brahmaputra, lat 26° 10', long 90° 38'.

‡ On the left bank of Brahmaputra, near the junction of Kullung with that river.

of infantry. The enemy in attempting to escape fell upon the horse, by whom about 20 were killed.

A small party under Captain Horsburgh was left in the stockade of Haulbur on the Kulling, whilst the main body of the detachment continued at Kalahur. The Burmans, advancing from their entrenchment at Ranghiger, attempted to cut off Captain Horsburgh's party. Their advance was, however, ascertained in time and checked by the picquet until Captain Horsburgh could form and bring up the detachment. Upon the approach of the infantry the Burmans broke and fled, but the irregular horse which had been sent into their rear intercepted the retreat of about 200, a great number of whom were sabred on the spot. After this repulse they abandoned the Ranghiger stockade and retired to Moua Mukh, where the chief force of the Burmans, now not exceeding 1,000 men, was posted under the Governor of Assam. The operations of the first campaign in Assam were closed by a successful attack on a stockade on the north bank of the Brahmaputra by Captain Wallace. The enemy escaped, but the stockade was destroyed.

The general result of the operations was decidedly favourable, and the British authority established over a considerable tract of country between Goalpara and Gauhati. It is likely, however, that had an advance been made in the first instance, the Burmans might have been expelled from a still greater portion of Assam.

As previously noticed, a large Burmese force had been collected in Arakan under the command of Meng-lie-maha Bandoola, an officer of high reputation. His headquarters were established at Arakan, where from ten to twelve thousand Burmese troops were assembled.

Early in May a division of this force crossed the Nias and advanced to Rutnapulling, about 14 miles south of Ramoo. Here they took up their position and concentrated their force to the extent of 8,000 men.

On receiving intelligence of the Burmese movements, Captain Noton moved from Ramoo with the whole of his disposable force. In consequence of the mismanagement of the elephant drivers and the want of artillerymen, the guns accompanying the detachment could not be brought into action, and the force had to retreat after reaching the Burmese stockade. On returning to Ramoo, Captain Noton was joined by three companies of the 40th Native Infantry, which raised his strength to 1,000 men. With these he resolved to await the Burmese attack.

On the morning of the 13th May the enemy advanced from the south, and occupied as they advanced, the hills east of Ramoo, being separated from the British force by the river Ramoo. Next evening they made a demonstration of crossing the river, but were prevented by the fire of two 6-pounders with the detachment. On the morning of the 15th they crossed the river on the left of the detachment and took possession of a tank surrounded by a high embankment, which protected them from the fire of their opponents.

Captain Noton drew up his force behind a bank 3 feet high surrounding the encampment. Upon his right hand, and sixty paces in front to the eastward, was a tank at which a strong picquet was posted, and his right flank was also protected by the river. On his left, and somewhat to the rear, was another tank, in which he stationed the Provincials and Mug levies. The regular sepoys were posted with the 6-pounders in his front or along the eastern face of the embankment.

From this place a sharp fire was kept upon the Burmans as they crossed the plain to the tank, but they availed themselves with such dexterity of every kind of cover, and so expeditiously entrenched themselves, that it was much less effective than might have been expected.

During the 15th and 16th the Burmans had considerably advanced their trenches, the firing was maintained throughout the day, but no important change in the relative position of the two parties was effected. The officer in charge of the guns was disabled, and the Provincials manifested strong indications of insubordination and alarm.

On the morning of the 17th the enemy's trenches were advanced within twelve paces of the picquets, and a heavy and destructive fire kept up. At 9 A.M. the Provincials and Mug levy abandoned the tank, which was immediately occupied by the enemy. The position being now untenable, a retreat was ordered, and effected with some regularity for some distance. The increasing number and audacity of the pursuers, and activity of a small body of horse* attached to their force, by whom the men that fell off from the main body were instantly cut to pieces, filled the troops with ungovernable panic, and rendered all attempts to preserve order unavailing, and on the arrival of the party at a rivulet the men dispersed. During the retreat Captains Noton, Trueman, Pringle, Lieutenant Gugg, Ensign Bennett, and Assistant-Surgeon Magsmore were killed, and about 250 men were killed or missing.

Lieutenants Scott, Campbell, and Codrington made their escape, but the two former were wounded. Much anxiety was caused by this defeat in Chittagong, Dacca, and even Calcutta, but the Burmans showed an evident want of enterprise, and with the exception of an advance on Chikera, from which they soon retrograded, the capture of the small post of Tek-Naaf, and an unsuccessful attempt to cut off the *Fatal* cruiser and the gunboats in the river, the Burmans General undertook no other military operations in this quarter, and was shortly after recalled for the defence of the provinces of Ava. By the end of July the Burmans abandoned all their positions to the north of the Naaf.

The British troops having left Cachar, the Burmans again advanced from Manipur and resumed their positions on the height of Talaung, Doodpatlee, and Jatiapur. This force was estimated at 8,000 men. Colonel Innes with 1,200 men proceeded to Cachar to expel the invaders. An attempt was made to dislodge the enemy from their position at Talaung, where they were strongly stockaded, but it failed, and the force returned to Jatiapur. The cause of the failure seems to have been that the force was too small for the work it had to do.

The constant exposure to rain in a country abounding with swamp and sickness amongst troops jungle produced much sickness amongst the men, and it was found necessary to remove them to a more healthy station. The Burmans remained in their entrenchments, being confined to them by the rise of the rivers, and no further movements took place on either side during the continuance of the rains.

Thus terminated the first period of the system of defensive operations above described. The more important enterprises of an offensive war to which these were wholly subordinate are now to be noticed.

The result of the operations described were of a mixed nature. In Assam a considerable advance had been made. In Cachar also a forward position had been maintained,

Remarks on the operations

* These were Cassay or Manipur horse

although the nature of the country, the state of the weather, and insufficiency of the force prevented the campaign from closing with the success with which it had begun

The disaster at Ramoo might have been avoided by a more decided conduct on the part of the officer commanding, and would certainly have been prevented by greater promptitude in the despatch of the expected reinforcements. Except in the serious loss of lives, it was wholly destitute of any important consequences. In all these situations the Burmese had neither displayed personal intrepidity nor military skill. Their whole system of warfare resolved itself into a series of entrenchments, which they threw up with great readiness and ingenuity. Behind these defences they sometimes displayed considerable steadiness and courage, but as they studiously avoided individual exposure, they were but little formidable in the field to soldiers. Nor was much to be apprehended from the generalship, which restricted the fruits of the victory of Ramoo to the construction of a stockade.

In prosecution of the offensive system of operations, a powerful force was fitted out by the presidencies of Bengal and Madras destined to reduce the islands on the coast of Burma and occupy Rangoon and the country at the mouth of the Irrawaddy river.

The Bengal force was composed as follows —

Her Majesty's 98th Regiment,		2nd Battalion 20th (40th) Native Infantry,
" 13th Regiment,		2 companies European artillery,

amounting in all to 2,175 fighting men

The Madras force consisted of two divisions, comprising—

Her Majesty's 41st Regiment		Her Majesty's 26th Madras Native Infantry
" 84th Regiment		" 28th Madras Native Infantry
" 1st Madras Fusiliers		" 34th Madras Native Infantry
" 3rd Madras Native Light Infantry		" 34th Madras Native Infantry
" 18th Madras Native Infantry		" 34th Madras Native Infantry

4 companies Artillery,

besides gholundaz, gun lascars, and pioneers, amounting altogether to 9,300 fighting men, making a total of 11,475 fighting men of all ranks, of whom nearly 5,000 were Europeans.

Major-General Sir A. Campbell, K.C.B., was appointed to the command of the joint force. Brigadier-General MacBean commanded the Madras force, and Captain Canning accompanied the expedition as Political Agent and

Joint Commissioner with the Commander-in-Chief

The transport for the divisions was as under —

1 "Hoshing"		9 "Hydong"
2 "Argyll"		10 "Zenobia"
3 "Eliza 1st"		11 "Ernaad"
4 "Eliza 2nd"		12 "Anna Robertson"
5 "Mermaid"		13 "General Wood"
6 "Robarts"		14 "Janet Hutton"
7 "Earl Kellie"		15 "Penang Merchant"
8 "Behance"		16 "McCauley"

17 "Francis Warden,"

with a total tonnage of 7,749 tons On board of these transports were embarked the following troops —

Her Majesty's 13th Light Infantry | Her Majesty's 31st Foot.

2nd Battalion 20th (40th) Native Infantry (detachment)

Detail of general and regimental staff—

Engineers	Medical Department
Artillery	Adjutant General's Department.
Quarter Master General's Department.	Pay Master's Department

Commissariat Department and camp followers

Total 3,231

Of these—

2,083 were European fighting men of all ranks

86 „ Native „ „

2,175 fighting men of all ranks

Artillery

4 18 pounders

4 5½ inch light howitzers

4 8 inch mortars

4 6 pounders

16

The Bengal force sailed about the middle of April, and arrived at Port Cornwallis in the Andamans, which had been appointed the general rendezvous, between the 25th and 30th of April

Embarkation of Madras force

The 1st Division of the Madras force embarked on the 13th April 1824 on board 23 transports, having a total tonnage of 10,793 tons, and consisted of the following

Transports corps —

Her Majesty's 41st Regiment	17th Regiment Madras Light Infantry
Madras European Regiment	8th Regiment Madras Native Infantry
3rd Regiment Madras Light Infantry	9th Regiment Madras Native Infantry

10th Regiment Madras Native Infantry

Detail of general and regimental staff—

Engineers.	Pioneers
Artillery	Commissariat and camp followers.

Total 8,778

Europeans of all ranks	..	Fighting men.
Natives „		1,988
		4,538
		6,526
	Total	

This division left Madras on the 16th April, and joined the Bengal fleet either at Port Cornwallis or on the voyage, and on the 5th of May such of the force as had assembled commenced its progress towards Rangoon.

The second division of the Madras force embarked on the 22nd May 1842 in nine transports of a total tonnage of 4,809, and consisted of—

Her Majesty's 89th Foot	Her Majesty's 22nd Regiment Native Infantry
" 7th Regiment Native Infantry	Pioneers and camp followers
Total 3,672 fighting men	
Europeans of all ranks	906
Natives "	2,766
Total	3,672

This division left Madras on the 23rd May, and joined at Rangoon in June and July

Further accessions to the force were received from Madras in August and September, and by the end of the year from Bengal, including a weak regiment of the line, 47th Foot, and the Governor General's Body-guard, making the whole force engaged in the first campaign nearly 13,000 men

From the rendezvous at Port Cornwallis on the voyage to Rangoon detachments under Brigadier McCleagh and Major Wibab were sent against Cheduba and Negrais

Naval force

The following vessels of the Royal and Hon'ble East India Company's Navy accompanied the

expedition —

Hon'ble Company's gunboats and schooners

1 "Robert Sparkie"	1 European, 12 natives	10 "Hobbs"	1 European, 12 natives
2 "Goldfinch"	1 " 12 "	11 "Muss"	1 " 12 "
3 "Eliza"	1 " 12 "	12 "Sulka Packet"	1 " 12 "
4 "Emma"	1 " 12 "	13 "Active"	1 " 12 "
5 "Phoenix"	1 " 12 "	14 "Ligea"	1 " 12 "
6 "Sophia"	1 " 12 "	15 "Swift"	1 " 12 "
7 "Kitty"	1 " 12 "	16 "Saugor"	1 " 12 "
8 "Phaeton"	1 " 12 "	17 "Tom Fough"	1 " 12 "
9 "Narcissa"	1 " 12 "	18 "Powerful"	1 " 12 "

Twenty row boats, each carrying an 18 pounder carronade in the bow

The "Diana" steam vessel

Each of the boats were manned by 18 natives, one European being in charge of the whole

Royal Navy

1 Her Majesty's ship	"Laffey, Commander Grant
2 " "	"Slaney
3 " "	"Lorne, Captain Marryatt
4 " "	"Sophie, " Ryves

Hon'ble Company's cruisers

1 "Mercury"	3 "Thetis"
2 "Tugmouth"	4 "Prince of Wales"
	5 "Jessie"

Abstract of Naval Force

Her Majesty's ships	4 each about 20 guns ==	80
Hon'ble Company's ships	5 " 8 " ==	40
Gunboats	18 " 2 " ==	36
Gun launches	20 " 1 " ==	20
Total	47	Total 176 guns

The expedition arrived at the mouth of the Rangoon river on the 9th of May, and stood into the river on the morning of the 10th, when the fleet came to anchor within the bar. On the following morning the vessels proceeded with the flood to Rangoon, the *Liffey* and the *Lorne* leading, and the *Sophie* bringing up the rear. No opposition was made to the advance of the fleet, nor did any force make its appearance.

Wilson* thus describes the Rangoon of 1824: "The town of Ran-

Rangoon in 1824.

goon is situated on the northern bank of the main branch of the Irrawaddy, where it makes a short bend from east to west, about 28 miles from the sea. It extends about 900 yards along the river, and is about 600 or 700 yards wide in its broadest part. At either extremity extend unprotected suburbs, but the centre, or town itself, is protected by an enclosure of palisades 10 or 12 feet high, strengthened internally by embankments of earth, and protected externally on one side by the river, and on the other three sides by a shallow creek or ditch communicating with the river, and expanding at the western end into a morass crossed by a bridge. The palisade encloses the whole of the town of Rangoon in shape of an irregular parallelogram, having one gate in each of three faces and two in the northern face. At the river gate is a landing place called the 'king's wharf,' where the principal battery was placed, and opposite to which the *Liffey* came to anchor at 2 P.M."

The enemy opened fire on the fleet from this battery, which was soon silenced by the guns of the frigate. Three detachments from the transports had meanwhile been landed—one of Her Majesty's 35th Foot, under Major Evans, above the town, another of Her Majesty's 41st Foot below it, while Major Sale with the light infantry of the 10th was directed to attack the river gate and carry the main battery. These measures were successful. The Burmese fled from the advance of the troops, and in less than 20 minutes the town was in possession of the British.

Upon taking possession of Rangoon, it was found to be entirely deserted, the inhabitants having fled to the adjacent jungles. This absence of the population, and the impossibility of deriving any aid from their local experience and activity, were productive of serious inconvenience to the expedition.

I now give a list of the general staff of the army and the strength of the different divisions —

General Staff

Major General Sir A. Campbell, 38th Foot,

K C B

Commanding the Forces

Captain J. Snodgrass, 38th Foot

Military Secretary and Aide-de-Camp and

Deputy Postmaster

Lieutenant J. Campbell, 38th Foot

Aide-de-Camp

Bengal Division

Brigadier General M. McCreagh, C.B.

Commanding Bengal Division

Brigadier M. Shaw, 87th Foot

2nd in-Command

Lieutenant-Colonel G. Pollock

Commanding Artillery

Colonel F. S. Tidy, 14th Foot

.. Deputy Adjutant General

Captain H. Piper, 38th Foot

Deputy Assistant Adjutant General

Major Evans, 38th Foot	Commanding 1st Brigade
Captain G Artkin, 13th Foot	Brigade Major, 1st Brigade
Lieutenant Colonel E Etrington, 47th Foot	Commanding 2nd Brigade
Captain Sadler, 47th Foot	Brigade Major, 2nd Brigade
Major Jackson, 46th Native Infantry	Deputy Quarter Master General
Captain Beecher	Deputy Assistant Quarter Master General
Lieutenant Trant, 38th Foot	Deputy Assistant Quarter Master General
Lieutenant O'Brien, 38th Foot	Deputy Assistant Quarter Master General
Captain Fiddes, 42nd Native Infantry	Deputy Commissary General
" Burlton, 4th Light Cavalry	Assistant Commissary General
" Gardun, 14th Native Infantry }	Sub Assistant Commissaries General
Lieutenant Rawlinson	Deputy Judge Advocate General
Paymaster Grimes, 14th Foot	Deputy Pay Master
Major Nicholson, 17th Native Infantry	Deputy Post Master
Captain J Snodgrass, 38th Foot	Field Engineer
Lieutenant Dickson	Fort Adjutant, Rangoon.
Lieutenant Ware, 38th Foot	Officiating Superintending Surgeon
R. Limond, Esq	Medical Storekeeper.
W Jackson, Esq	

Madras Division

Brigadier General MacBean, left in August 1824	} Commanding
Brigadier General Fraser, left in October 1824	
Brigadier-General Cotton, from January 1825	
Lieutenant-Colonel Mallett	Commanding 4th Brigade.
" Smelt, 41st Foot	" Commanding 1st Brigade
" Brodie	Commanding 2nd Brigade
" Smith, C B, Madras Native Infantry	Commanding 3rd Brigade
" Goodwin	Commanding 5th Brigade
" Hopkinson	Commanding Artillery
" Snow	Deputy Adjutant General
Lieutenant J Kerr	Deputy Assistant Adjutant General
Captain Steel	Assistant Quarter Master General
" Spicer	Deputy Assistant Quarter Master General.
" Tullock	Deputy Commissary General
Lieutenant T R Manners	Deputy Assistant Commissary General
Captain Williamson	Deputy Judge Advocate General
Lieutenant Lewis	Commissary of Stores
Captain Stock	Paymaster
" Todd	Deputy Paymaster
" Montgomery	Brigade Major of Artillery
" Young	Brigade Major, 4th Brigade
" Wilson	Brigade Major, 1st Brigade
" Briscoe	" Brigade Major, 2nd Brigade.
" Kyd	" Brigade Major, 3rd Brigade
Lieutenant Johnstone	" Brigade Major, 4th Brigade
Surgeon Howard	" Superintending Surgeon
Assistant Surgeon Davidson	" Deputy Medical Storekeeper

*Number of troops landed at Rangoon from May 1824 to January 1825 **

Regiments	Date of arrival at Rangoon	Number, in- cluding officers	Remarks.	
<i>Bengal Troops</i>				
Detachment European Foot Artillery	11th May 1824	360	2,585	
Her Majesty's 13th Light Infantry		727		
Her Majesty's 38th Foot		1,035		
Detachment 20th Native Infantry		24		
Rocket Artillery	28th December 1824	86		
Governor General's Body guard	December 1824	353		
<i>Madras Troops</i>				
Detachment Foot Artillery	11th May 1824	556		
Her Majesty's 41st Foot		762		
Madras European Regiment		433		
1st Battalion Pioneers		552		
3rd Regiment Native Infantry		676		
7th Regiment Native Infantry		695		
12th (8th) Regiment Native Infantry		652		
9th Regiment Native Infantry		658		
18th (10th) Regiment Native Infantry		609		
34th (17th) Regiment Native Infantry		617		
43rd (22nd) Regiment Native Infantry		711		
Her Majesty's 89th Foot	June and Nov 1824	1,012		
Her Majesty's 47th Foot	December 1824	177		
26th Regiment Native Infantry	October 1824	636		
28th Regiment Native Infantry	September 1824	832		
30th Regiment Native Infantry	September 1824	613		
<i>Bombay Troops</i>				
Detachment Foot Artillery	June 1824	69	9,280	
		Total	11,845	

* From Wilson's *Burmese War*

The days immediately following the capture of Rangoon were appropriated to the landing and disposition of the troops who were posted in the town, in the Shway-dagon pagoda, about $2\frac{1}{2}$ miles from town, or on the two roads leading from each of the northern gates which unite near the pagoda, leaving a tolerably open space between them. Parties of seamen from the Royal vessels with detachments of the European regiment were also employed in scouring the river, and destroying armed boats or fire-rafts. Detachments* were also sent into the interior to endeavour to find and bring back the population, but without success.

Measures were also adopted to collect boats and supplies in view to an ultimate advance into the interior.

It soon appeared that the disappearance of the inhabitants rendered it impossible to equip and man a flotilla to proceed up the river, and the desolation of the country, from which nothing in the shape of supplies could be procured, rendered it certain that the force was entirely dependent on Bengal and Madras for every description of conveyance and food. Such a state of things had been little expected from the known resources of Rangoon, and accordingly no previous preparations had been made.

Meanwhile the islands of Cheduba and Negrais had fallen into our hands after a spirited resistance, and the detachments employed against them rejoined the force at Rangoon on the 11th June. Between this date and 10th May several engagements had taken place with the Burmans, who having received reinforcements had been for some days closing on the British lines, cutting off stragglers, firing upon the picquets, and creating constant alarms by night and day. In order to stop this, Sir A. Campbell marched out on the 26th May with four companies Europeans, 250 sepoy, one gun, and a howitzer against their entrenchments in the vicinity of the camp. Three unfinished

Action of the 28th May 1824 and undefended stockades were destroyed, and after a fatiguing march of 8 or 10 miles, the road debouched from the jungle into an extensive valley of paddy fields, some inches under water, at the end of which, two miles distant, stood the village of Joazong.

It must here be mentioned that some time previously the artillery (the men being quite exhausted) had been sent back under escort of the Native infantry †. The Burmese generals drew up their men in a long line in rear of the village flanked by impenetrable jungles. The advance was made in echelon of companies from the left direct for the village, close to which a heavy fire was suddenly opened from two stockades so well masked as not to be distinguished from a garden fence, even at the short distance of 60 yards. Brigadier-General MacBean was now ordered to keep the plain with the light company, outflanking the stockades and village and keeping the enemy's line in check, while the other three companies, led by Majors Evans and Dennie, rushed forward to the assault, and in less than ten minutes the first stockade was carried and cleared of the enemy at the point of the bayonet. The troops then moving out formed up with the greatest coolness and regularity for the attack of the second work. The second stockade, resolutely and obstinately defended, was carried in the same gallant style, the garrison within, fighting man to man, was put to the bayonet. Many escaped to the jungle, but those who fled to the plain were met by the company under Brigadier-General MacBean, who allowed few to get away, he took no prisoners.

* One of these detachments destroyed the stockade of Keminnondine, 4 miles from town.

† Extract from despatch of Brigadier General Sir A. Campbell.

In this action the British force did not exceed in number 200 men, while that of the Burmans, which was ascertained to be the main body of the enemy in that part of the country, was about 7,000. The enemy's loss was 300 killed. On our side one officer killed and two wounded, and five men killed and twenty-eight wounded.

On the following day a party of the enemy was driven with some loss from a stockade in the jungle.

The strongest position occupied by the Burmans at this time was at Kemmendine, on the river, nearly two miles from the post of the same name, from which they were driven on the 10th May.

Burmese position at Kemmen-
dine

At this place the Burmans had erected one main stockade of unusual strength and extent, whilst in the vicinity there were several others more or less elaborately constructed. Two columns were marched on the 3rd June to attack the post by land, whilst Sir Archibald Campbell proceeded up the river with two cruisers and three companies of Her Majesty's 41st. The vessels advanced abreast of the entrenchment, and the troops landed and burnt the villages. The land column arrived at the stockade after a harassing march, but as they moved through the jungle were mistaken for a body of Burmans, and received a heavy cannonade, which occasioned some loss and disconcerted the troops, so that they could not afterwards be led to the attack. The force therefore was obliged to retire without attaining its object.

On the 10th June a strong force was sent once more against Kemmendine, and the stockades between it and the great pagoda. This force consisted of nearly 3,000 men, with four 18-pounders and four mortars and some field-pieces. It moved from the lines on the morning of the 10th June under the Commander-in-Chief, whilst two divisions of vessels proceeded up the river to attack the stockade in that direction.

About two miles from town the head of the column was stopped by a stockade, apparently very strong and full of men. Two heavy guns and some field-pieces opened upon it, and the troops surrounded it on three sides, but the jungle was so thick and close as to prevent the possibility of altogether cutting off the garrison. In less than half an hour a gap was made in the outward defences of the work, and a part of the Madras European Regiment, supported by part of Her Majesty's 41st Regiment, was ordered to charge, when the work was immediately carried, with a trifling loss on our part, the enemy leaving one hundred and fifty men dead on the ground. While this was going on, a spirited attack was made on the other side of the stockade by the advanced companies of Her Majesty's 13th and 38th Regiments, who by assisting each other up the face of the stockade (at least 10 feet high) entered about the same time as the party by the breach.*

After gaining this point the force moved forward to the river, where it came upon the chief stockade, which was immediately invested. The left of the line communicated with the flotilla, but the right could not be sufficiently extended to shut in completely the entrenchment between it and the river. The night was occupied in erecting batteries, and at daylight on the following morning a heavy and well directed fire was opened from our breaching and mortar batteries, which was kept up for nearly two hours, when it was found that the enemy had evacuated the place.

* Extract from despatch of Brigadier General Sir A. Campbell.

Return of killed, wounded, and missing from 1st to 19th June 1824

	Killed	Wounded	Remarks
Officers		6	The quantity of slugs made use of by the enemy will account for the great disparity in the proportion of killed and wounded
Non-commissioned rank and file	14	105	
Natives attached	2	11	
Total	16	112	

The stockade of Kemmendinge, commanding the river between it and the town, and connecting the Shway-dagon pagoda with the river, prevented the latter from being turned, or Rangoon from being threatened in that direction, and it was therefore occupied by a small European detail and a battalion of Native infantry

After the capture of this post the Burmans concentrated their forces at Donabew

A short interval of comparative tranquillity ensued between this date and the renewal of active operations. And now the rains had set in, and sickness began to thin the ranks and impair the energies of the invaders. The effects of a burning sun were only relieved by the torrents that fell and brought disease along with their coolness. Constant exposure to a tropical sun and the exhaustion caused by unremitting exertion were certain causes of sickness, from which no rank was exempt. Many of the senior officers, including the Commander-in-Chief, were attacked with fever during the month of June. Amongst the privates, however, the use of spirituous liquor and the want of a proper supply of fresh meat and vegetables augmented the malignant influence of the climate, and crowded the hospitals with sick.

Fever and dysentery were the principal maladies, and were both due to local causes, but the scurvy and hospital gangrene, which also made their appearance, were ascribable as much to depraved habits and inadequate nourishment as to fatigue and exposure*. They were also latterly, in some degree, the consequences of extreme exhaustion, forming a peculiar feature of the prevailing fever, which bore an epidemic type, and had been felt with equal severity in Bengal. So continuous was the sickness that by the end of the rainy season scarcely 3,000 men were fit for active duty. The arrival of adequate supplies, and more especially the change in the monsoon, restored the force to a more healthy condition.

Dr G. Waddell thus reports on the sickness of the force at that time.

Number in hospital "During June, July, August, September, and October the average monthly admissions into hospital from the Artillery was 65 Europeans and 62 natives, being nearly one-third of the greatest numerical strength of the former and one-fourth of the latter; and this number was considerably less in proportion than that exhibited by any European regiment in either division of the army. The aggregate number

in hospital during the whole 14 months to which this account is limited was

605 Europeans and 687 natives, a large proportion being made up of readmissions for dysentery. Of the former, 49 died, or a fraction less than 1 in 12½. Amongst the latter, 84 deaths occurred, or something less than 1 in 20. On the setting in of the cold season the general sickness began to decline, and from January to July 1825 it was comparatively moderate."

During the month of June several affairs of minor importance occurred, and on the 1st July the only general action in which the troops had yet been engaged took place.

When the court of Ava received intelligence of the occupation of Rangoon by the British, it was far from feeling any apprehension or alarm, on the contrary, the news was welcomed as peculiarly propitious, and the only anxiety entertained was lest the invaders should escape. Orders were, therefore, issued to collect as large a force as possible to surround and capture the British.

On the morning of the 1st July the Burman force was observed in motion, the main body drew up upon the left of the British lines in front of Kemmendine stockade and Shway-dagon pagoda, but they were screened

from observation by the intervening jungle, and their disposition and strength could not be ascertained. Three columns, each of about 1,000 men, moved across to the right of the line, where they came in contact with the picquets of the 7th and 22nd Regiments Madras Native Infantry, which steadily maintained their ground against these superior numbers. The enemy then penetrated between the picquets, and occupied a hill, whence they commenced an ineffective fire on the lines, but were speedily dislodged by three companies of the 7th and 23rd Regiments Madras Native Infantry, with a gun and howitzer, under Captain Jones, and the personal direction of the Commander-in-Chief. After a short but effective fire the *apoyes* were ordered to charge, which they did "in the most gallant style,"* and the enemy immediately broke and fled into the jungle. The body in front of the head of the lines apparently awaited the effect of this attack, and fell back immediately on its failure. Part of the force recrossed the river, and a considerable division entered the town of Dalla opposite to Rangoon, where Lieutenant Isaac, in command of the post, was shot. The town of Dalla was in consequence destroyed.

The Burmans, undeterred by the check which they had received, continued gathering strength in front of the lines, and to give constant annoyance. Sir A. Campbell, therefore, determined to make as general an attack as the very woody and inundated state of the country would admit of. For that purpose the force was formed in two columns,—one proceeding by land, under Brigadier-General MacBean, for the purpose of surrounding the enemy on that side, while the other, under the Commander-in-Chief, proceeded by water to attack their stockaded positions on the banks of the river in front. To this post the enemy appeared to attach the greatest importance, and the stockades were so constructed as to afford mutual support, presenting difficulties apparently not to be overcome without great loss of life. Sir A. Campbell describes the action as follows —

"The armed vessels which accompanied the river column, viz —

Transport <i>Satellite</i> ,		H. E. I. C. cruiser <i>Thetis</i> , Lieutenant Greer,
H. E. I. C. cruiser <i>Tegnumouth</i> ,		Penang Govt yacht <i>Jessie</i> , Captain Poynter,

* Despatch of General Sir A. Campbell.

the whole under command of Lieutenant Frazer of Her Majesty's ship *Lorne*, now took their stations and opened a fire, which soon silenced that of 14 pieces of artillery, swivels, and musketry from the stockades, and in one hour the preconcerted signal of 'breach practicable' was displayed at the main mast-head. The troops, as previously arranged, entered their boats on the signal being made, consisting of a detail of the 3rd, 10th, and 17th Regiments Madras Native Infantry, commanded by Major Wulab of the latter corps, ordered to lead the attack, and supported by Lieutenant-Colonel Goodwin with 200 men of Her Majesty's 41st Regiment and one company Madras European regiment. The assault was made in the best order and handsomest style," &c, &c

The detachment 41st now re-embarked and attacked the second stockade, which was immediately carried. The third stockade was evacuated by the enemy.

The land column had been equally successful. Advancing to Kamroot, a short way from Rangoon, the troops, headed by the 13th and 38th under Majors Sale and Firth, captured

in rapid succession seven strong stockades. The enemy, driven from the inferior defences, fell back upon the central position, consisting of three strong entrenchments within each other, in the innermost of which Thamba Woongyee, who commanded, had taken his station and endeavoured to animate his men to resistance. This conduct, so contrary to the usual practice of the Burman chiefs, who rarely are ever present at an engagement which they direct, was of no avail. The capture of so many stockades by so inferior a force and without any assistance from artillery was an achievement unsurpassed during the war, and first made a profound impression on the minds of the enemy, who henceforward learned to think themselves insecure within the strongest defences.

In these affairs our loss was trifling, whilst 800 of the Burmans were left dead in the stockades, and numbers of their wounded were left to perish in the surrounding jungles.

The inundated state of the country now precluded the possibility of

Expedition against Tenasserim undertaking any movements of importance, and only a few minor operations were carried out until August. In this month an expedition was despatched against Tenasserim, a valuable tract of sea coast, which it was thought would afford supplies of cattle and grain. The force consisted of details of Her Majesty's 89th Regiment and 7th Madras Native Infantry with several cruisers and gun-brigs under command of Lieutenant-Colonel Miles. They arrived before Tavoy on the 8th September, and a conspiracy amongst the garrison occurring, the town was occupied without opposition. At Mergui, where the armament arrived on the

Capture of Mergui, 6th October. 6th October, a heavy fire was opened from the batteries of the town, mounting 33 pieces of heavy ordnance. In about an hour the whole were silenced by the guns of the fleet, and a landing was ordered to the right of the town. This movement was immediately followed by the advance of a party of Her Majesty's 89th Regiment to the gate of the stockade under a heavy and well directed fire from the enemy, and it was at this spot the greater loss was sustained. The ground for some distance between the river and stockade was deep mud and water, and the rain poured down in torrents. When the ladders were brought up, an escalade was ordered and carried promptly into effect by Her Majesty's 89th Regiment.*

* Despatch of Lieutenant-Colonel Miles, c. 2

The enemy's loss was said to be 500 men. Our loss was 6 men killed, 1 missing, 2 officers and 22 men wounded. Much attention had been paid to the defence of the place. The batteries were placed on the brows of the different hills commanding the shipping, and the garrison numbered about 3,500 men.

In August and September nothing of importance took place. The Burmans made perpetual night attacks on the picquets, and attempted to cut off three gun-brigs stationed in the Dalla creek. The attempt failed.

In September information was received that the enemy had established a post at Paulang, and was busily employed in constructing fire-rafts and boats for the destruction of the shipping. In consequence of this, Brigadier-General Fraser with a strong detachment was despatched on the 21st September to dislodge the enemy. The place was accordingly destroyed.

On the 5th October a reconnoitring party, consisting of 800 men of the Madras Brigade under Lieutenant-Colonel Smith, C B, was ordered to proceed to the neighbourhood of Aunauben and the pagoda of Keykloo, where the enemy were reported to be concentrating, and to attack him as often as he might consider his force and means adequate to do so with effect.

Our arms on this occasion sustained a serious reverse, although the commencement of the operations was promising enough.

The force consisted of—

800 Native infantry		2 camel howitzers
40 pioneers		

and were afterwards reinforced by—

300 rank and file Native infantry		2 camel howitzers
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The detail of these operations is given in his report by Lieutenant-Colonel Smith, of which the following is an extract—

"At 10 o'clock A M on the 5th October I arrived at Tadagahee, and finding the troops much exhausted by the extreme heat, halted a few hours to refresh.

"At 2 o'clock P M the detachment advanced, and in 20 minutes reached a deep nala, on crossing which the advance guard was received by a line of fire from the enemy. The leading company pushing on quickly dispersed these, and discovered a stockade directly facing the main road, a plain bounding it on the right, a jungle on the left. The howitzers opened fire on the stockade, and presently it was escaladed and taken by Captain Williamson and party. The enemy, however, escaped with trifling loss. The rear guard coming up was attacked by the enemy. Partial firing also continued from the front and left flank.

"The advance was now continued, and on the advance party emerging on the plain, a small body of horse and foot were seen about 600 yards off. These retreated quickly on our advancing. After this a breastwork was discovered and carried with trifling loss. A succession of breastworks on our route were stormed and carried in the same gallant manner. The taking of these, however, retarded our progress, and the detachment did not arrive in the vicinity of Keykloo till 5 o'clock. About this time the guides affected to be ignorant of the direct route to the stockade. As the road we were in was good and leading direct upon a pagoda said to be on the left of the stockade, we pursued it.

"Shortly after Captain Williamson with the 2nd Division was directed to diverge to the right, and pushing through the jungle to attack the enemy's

works in that quarter, while Major Wahab should assail it on the left, intending that Major Ogilvie's division should be available for any other service it might be required for.

"The necessary reconnaissance having been made unmolested, the extreme silence that had hitherto prevailed induced the belief that the post had been abandoned, but as the lateness of the hour would not allow of any further examination of the enemy's position, arrangements were made for assailing the place.

"The party advanced with ladders to escalade. The enemy in the stockade did not fire a shot until the attacking party had got well in front of their works, and then at a distance of 50 or 60 paces discharged volleys of grape and musketry with an effect and regularity hitherto unequalled in this country. Several of the pioneers with the ladders were knocked down, together with the leading officers, and the men were seized with panic and lay down to escape the fire.

"The lateness of the evening rendered this first check irreparable, and seeing there was nothing to be got from renewing the attack at that hour, I ordered a retreat.

"On the first discharge from the pagoda I had directed Captain Bell with 100 men to move round and endeavour to seize it. This they endeavoured to do, but the pagoda, contrary to report and expectation, was found to be strongly stockaded and not assailable without ladders.

"Order and discipline, which had been strictly observed until this period, now vanished, and the corps breaking up and crowded indiscriminately into one general mass retired to the plain. Here they were collected and formed up, and a strong rear guard being formed, in orderly retreat was made. The detachment reached Tadagahet at 11 A.M. without meeting with any annoyance on the way.

"Our loss in the actions of the 5th and 7th was—

Officers	Killed	Wounded
Men	2	6
	19	67 "

Note—The principal causes of the failure of this expedition would seem to be—

1st—Defective intelligence as to the country and the strength and position of the enemy.

2nd—The Keykloo stockade being reached late in the evening, was attacked without being properly reconnoitred. In contrasting the attack on this stockade with that on Kemmending (10th and 11th June), it will be seen that the troops on that occasion passed the night in erecting batteries, which opened fire in the morning, after which the assault was made. In the present instance no use seems to have been made of the four howitzers with the force.

At the same time that the expedition against Keykloo was sent out, another under Major Evans was de-patched by river to interrupt the proceedings of the Burmans, who were collecting in considerable numbers near Thantabin. The detachment consisted of 300 rank and file of Her Majesty's 88th Regiment, 100 Madras Native infantry, a detachment Bengal artillery, and embarked on the morning of the 5th October on board a squadron of gunboats, flotilla, &c, &c, under the command of Captain Chadds of Her Majesty's ship *Arachun*.

The first day they reached Pagoda Point at the junction of the Lyng and Paulang rivers. At 2 P.M. next day the squadron proceeded up the Lyng

river. Bodies of the enemy were seen moving up the right bank, and numerous war-boats hovered in our front and kept up a continued but distant fire from cannon. On the 7th two stockades were taken without loss, and the force arrived near the large fortified village of Thantabain. This village was defended by three long breastworks, with a very extensive stockade constructed of large teak beams, and 14 large war-boats, each mounting a gun, were anchored so as to defend the approach to it.

The armament now advanced to the assault,—the steamer with the *Satellite* and bomb-ketch in tow, and the troops in their boats ready to land where ordered. In passing the breastwork a running fire was received from junjals and musketry, which was returned with showers of grape from the *Satellite*, and the enemy being thrown into confusion, the troops and scaling ladders were directed to land. In a few minutes every work about the place was in our possession. During the night fire-rafts of a most formidable appearance were floated down the river, but did not touch any of the vessels. At 6 next morning the force moved with the tide, and was fired on from a long line of breastworks and a very large stockade on the right. The fire of the latter was soon silenced by the guns of the *Satellite*. The troops and pioneers were then ordered to land, and this formidable stockade was carried without a struggle. It is thus described by Major Evans: "The length of the front and rear faces is 200 yards, the sides 150. It is built of solid timber 15 feet high, with a platform inside all round 5 feet broad and 8 feet from the ground. In front this stockade is defended with breastworks, and would easily contain 2,000 men. Not one man was lost in this expedition."

Capture of Martaban

In November Martaban was captured, and occupied by the British during the remainder of the war.

The grand army which had been forming along the course of the Irrawaddy, and which had been gradually approaching

Burmese investment of Rangoon

the British lines, now ventured boldly to invest them. The force was now estimated at 60,000 men, of whom more than half were armed with muskets, the rest with swords and spears. A considerable number of junjals throwing balls from six to twelve ounces and a body of 700 Cossack horse were attached to the force. No opposition was made to the regular investment by the enemy of the British lines. This extended in a semi-circle from Dalla opposite Rangoon round by Kemmendine and the Great Pagoda to the village of Puzindoon on the creek communicating with the Pegu branch of the river, their extreme right being thus opposite the town on one side and their extreme left on the other.

The British force, reduced as it was, was far from adequate to the defence of the position it occupied. The shipping protected Rangoon and the position on the river side, whilst the extreme left was defended by the post at Kemmendine, supported on the river by Her Majesty's sloop *Sophie* and a strong division of gunboats.

The enemy commenced operations on the 1st December by a resolute

Burmese attack Kemmendine, 1st December 1824

attack on the post of Kemmendine, which was repulsed by the garrison and flotilla. Repeated attacks were made during the day, but with the same results, and at night fire-rafts were directed against the shipping of Rangoon, but without effect.

In the afternoon of the 1st a reconnaissance was made of the enemy's left by a detachment of Her Majesty's 13th Regiment and the 18th Madras

Native Infantry under Major Sale They broke through the entrenchments, killed numbers of the enemy, and returned loaded with arms and standards. The Commander-in-Chief now determined to abstain from interrupting the work of the opposing army, and to wait until the whole of their material should be brought forward and be within his reach. In the evening, however, the enemy advanced a cloud of skirmishers under the north-east angle of the pagoda, who commenced a harassing and galling fire on the works. Two companies of Her Majesty's 38th Regiment under Captain Piper were ordered to clear them out—a duty they rapidly performed.

At daylight on the 2nd, finding that the enemy had advanced during the night and entrenched a height in front of the north gate of the pagoda, which gave them an

2nd December
enfilading fire on part of our line, Captain Wilson, with two companies Her Majesty's 38th Foot and 100 men 28th Madras Native Infantry, was ordered to dislodge them. "No order," says Sir A. Campbell in his despatch, "was ever more rapidly or handsomely obeyed. The brave sepoys, vying with their British comrades in forward gallantry, allowed the Burmans no time to rally, but drove them from one breastwork to another, fighting them in the very holes they had dug, finally to prove their graves."

During the 3rd and 4th the enemy carried on his labours with indefatigable industry, the attacks on Kemmendine continued with unabating violence, but were repulsed both by land and water. Our navy lost no opportunity of coming in contact with the much-vaunted boats of Ava, and in one morning five out of six, each mounting a heavy piece of ordnance, were boarded and captured by our men-of-war boats.

The enemy having completed his left wing with its full complement of artillery and warlike stores, it was determined to attack that part of his line on the morning of the 5th. Accordingly the senior naval officer, Captain Chadds, was requested to move up to the Puzendoon creek during the night with the gun flotilla, bomb-ketch, &c, &c, and commence a cannonade on the enemy's rear at daylight. This service was most judiciously performed. At the same time two columns of attack were formed composed of details from different regiments. The first, consisting of 1,100 men, was commanded by Major Sale, who was directed to attack and penetrate the centre of the enemy's line. The other, consisting of 600 men under Major Walker, was ordered to attack their left, which had approached to within a few hundred yards of Rangoon. At 7 A.M. both columns moved forward to the attack, and both succeeded with a degree of ease which their intrepid and undaunted conduct undoubtedly ensured. A troop of the Governor General's Body-guard, which had been landed the preceding evening, did good service, and charging over the broken and swampy ground, broke and dispersed the defeated enemy. I conclude the account of this action in Sir Archibald Campbell's own words:—
"The Cassay horse fled mixed with the retreating infantry, and all their artillery, stores, and reserve depôts, which had cost them so much toil and labour to get up, with a quantity of small arms, gilt chittahs, standards, and other trophies, fell into our hands. Never was victory more complete and decided, or the triumph of discipline and valour over the disjointed efforts of irregular courage and infinitely superior numbers more conspicuous."

On the 6th December Bandoola brought up the remnant of the defeated left to strengthen his right and centre, and continued day and night to carry on his approaches in front of the Great Pagoda. The artillery was now ordered to slacken its fire and the infantry to keep out of sight. This system being mistaken for timidity, his whole force was on the morning of the 7th collected in our immediate front.

At 7-30 A.M. on the 7th all was ready to assault the trenches in four columns of attack under the superintendence of Lieutenant-Colonel Miles, and commanded by Lieutenant-Colonels Mallet, Parlbj, Brodie, and Captain Wilson of the 38th Foot. At a quarter before 12 every gun that could bear upon the trenches was ordered to open, Major Sale at the same time making a diversion on the enemy's left and rear. At 12 o'clock the cannonade ceased, and the columns moved forward to their respective points of attack. Captain Wilson's and Lieutenant-Colonel Parlbj's divisions first made an impression from which the enemy never recovered. They were driven from all their works without a check, abandoning all their guns, with a great quantity of arms of every description. The total defeat of Bandoola's army was now fully accomplished. His loss in killed and wounded must have amounted to 5,000 men. Of 300 pieces of ordnance that accompanied the grand army, 240 fell into our hands.

Return of ordnance and military stores captured between the 1st and 7th December 1824

Brass guns	{ 18 pr, 16 pr 65 pr
Iron guns	{ 18 pr, 36 pr 15 pr, 44 pr 63 pr, 42 pr 195 swivels
Gunpowder destroyed	10,000 lbs
Roundshot	360 rounds
Muskets	900
Swords	2,000
Intrenching tools	5,000

Return of killed and wounded in the actions from 1st and 7th December 1824

	Killed	Wounded	Total
Officers	2	12	14
Non commissioned rank and file	14	234	248
	16	246	262

Sir Archibald Campbell thus speaks of the conduct of the troops: "My Europeans fought like Britons, and proved themselves worthy of the country that gave them birth, and I trust I do the gallant sepoys justice when I say that never did troops more strive to obtain the palm of honour than they to rival their European comrades in everything that marks the steady, true, and daring soldier."*

On returning to Rangoon on the evening of the 8th, it was observed that the enemy's corps on the Dalla side of the river had not been wholly withdrawn. As they were not likely to remain after hearing the news of Bandoola's defeat, it was resolved to attack them at once. Detachments of Her Majesty's 89th Foot, 1st Madras Europeans, and 43rd Madras Native Infantry were immediately ordered under arms, and just as the moon rose

* Despatch, dated 8th December 1824.

they moved across under command of Major Farmer of the latter regiment, landed and jumped without a moment's hesitation into the enemy's trenches. Many Burmans were killed in the short conflict that ensued, and the remainder were driven at the point of the bayonet into the jungle, leaving ten good guns and many small arms in our possession.

Next morning a reconnaissance was made, and the enemy was found still occupying some stockades in the jungle in considerable force. A reinforcement of Her Majesty's 89th Foot and 300 of the 12th and 30th Madras Native Infantry were sent to disperse them. This was done in the most complete manner.

Notwithstanding the defeats he had sustained, the Maha Bandoola speedily reorganised his troops at no great distance from the scene of his misfortunes, and relinquished the command to an officer of rank, Maha Thilwa, under whom the Burmans were soon stockaded at Kokan, a place about midway between the Lyne and Pegu rivers, and about 4 miles to the north of the Shway-digon pagoda. Their removal was necessary to confirm the impression made by the late victory, and to open the country to the further advance of the army, as well as to secure the safety of Rangoon, which was endangered by the practices of Burman warlike, that not only launched fire-rafts down the stream, but employed uccandikes to set the town on fire.

Action of 15th December

On the morning of the 15th two columns of attack were formed as follows:

The night consisted of 200 of Her Majesty's 13th Light Infantry and 300 men of the 18th and 34th Madras Native Infantry, under the direction of Brigadier-General Cotton, with one field-piece and a detachment from the Governor General's Body-guard under Lieutenant Archibald. This column was directed to make a detour round the enemy's left, and if possible gain the rear of his position, and there await the preconceived signal of attack.

The left column consisted of 500 Europeans from the 35th, 41st and 49th Foot and Madras Fusiliers and 300 natives from the 9th, 12th, 25th and 30th Regiments Madras Native Infantry, five field-pieces, and a detachment of the Body-guard. These were under command of General Cramphell.

Left column

On arriving at the enemy's position it was found to be of great strength, consisting of two large stockades on either flank connected by a central entrenchment. Each wing was about 100 yards long by 200 broad, and projected considerably beyond the centre. The whole was occupied by a force of 20,000 men.

Burmese position

The left column was now formed into two divisions under Lieutenant-Colonel Miles 89th and Major Evans 35th Foot.

The preconceived signal was now given and answered by General Cotton, who having gained the rear attacked the centre, the two divisions of the left column stormed the flank stockades. In fifteen minutes the whole works were in the hands of the assailants. Besides the loss sustained by the enemy in the entrenchments, a number were destroyed in their retreat by Colonel Miles' column, and many were sabred by the Body-guard. In this action our loss was more than usually severe, amounting to 18 killed and 114 wounded. This includes 3 officers killed and 12 wounded.

During these operations the boats of the flotilla were equally active, and, with the assistance of the *Diana* steamer, succeeded in capturing thirty war-boats and in destroying several fire-rafts and much combustible material.

These several actions changed the character of the war; the Burmans, no longer daring to attempt offensive operations, restricted themselves to the defence of their positions along the river.

The road was now open for the advance of the British force on Ava, but before following the operations which were now undertaken in these parts, it will be necessary to revert to the renewal of hostilities on the north-east and eastern frontiers of British India.

Upon the return of the British forces in Assam to their cantonments in Gauhati, Burman parties reoccupied the stations of Kilibur, Riha Chowkee, and Nowgong, levying heavy contributions and pillaging the country. The renewal of operations here commenced with their expulsion from these positions.

The force under Colonel Richards, who commanded during the ensuing campaign, consisted of—

46th Regiment Native Infantry,	Rungpore Local Battalion,
57th Regiment Native Infantry,	Dinapore Local Battalion,
Chumpuran Light Infantry,	

with details of artillery and mital and detachment of irregular horse, amounting in all to about 3,000 men. About the end of October two detachments were sent against the Burmans. Major Waters, with the flotilla and part of the Dinapore Battalion, was directed to proceed to Riha Chowkee and Nowgong, and the other boats, with one wing of the Chumpuran Light Infantry, with four guns under Major Cooper, advanced to Kilibur. The latter arrived at Kilibur on the 29th October, surprising a small party of Burmans on the route. Major Waters also on his way dislodged a party from the village of Hatha-gaon, and on his arrival at Riha Chowkee took the party stationed there by surprise.

In these affairs the completeness of the success was not more owing to the steady courage of the troops than to the accuracy of the information obtained through the Intelligence Department, Assam. Lieutenant Neufville, in charge of the Intelligence Department in Assam.

Colonel Richards moved the remainder to Kilibur about December. The chief means of transport being water conveyance, and the boats being tied up against the current, the progress was slow. From Kilibur the force marched to Muna Mukh, where it arrived on 6th January. Expeditions were sent from hence against parties of the enemy said to be stockaded at Kutchacee, Hatha-gaon, Deogroo, and Deogroon.

The Deogroo party surprised the enemy in the stockade, which was taken by assault. The other places were found vacated by the enemy.

The enemy were now forced to concentrate their forces at Jorehat. They did not remain long here, but retired to Rungpore on the bank of the Dikho, 20 miles from its junction with the Brahmaputra. The flotilla was left near the mouth of the Dikho, which was too shallow to admit boats of burthen, and a wing of the 46th Native Infantry remained for its protection.

On the morning of 27th January the Burmese garrison of Rungpore attacked the advanced post of the encampment at a bridge over the Namdong nala, defended by the Rungpore Light Infantry under Captain

McLeod. Colonel Richards moved out to their support with two companies of the 57th Regiment and the Dinapore Local Corps, and found the enemy in considerable force, extending themselves into the jungle right and left, and threatening to surround the party defending the post. The thickness of

the jungle rendering it impossible to attack the enemy with advantage, Colonel Richards withdrew his party from the bridge and suspended his fire, by which his assailants were encouraged to show themselves more boldly, mistaking these arrangements for weakness or apprehension. As soon as they offered a sufficient front, Colonel Richards ordered a charge to be made, which the Burmans did not wait to sustain, but broke and fled.

On the 29th January Colonel Richards having received a reinforcement of guns, marched on Rungpore. The approach to the capital had been fortified by the enemy, a stockade had been drawn across the road, the left of which was strengthened by an entrenched tank a little way in front, and the right was within gunshot of the fort. The position mounted several guns, and was defended by a strong party. This information had been obtained by Lieutenant Neufville, Deputy Assistant Quarter Master General, who had gone out to reconnoitre on the morning of the 28th, and got to it without being perceived. The force marched at daybreak in the following order —

- 1st — Detachment 64th Regiment formed the advance guard, from which a havildar's party was sent 100 paces in front
- 2nd — The Volunteer Cavalry
- 3rd — The Brigade of Howitzers drawn by elephants
- 4th — The 57th Regiment
- 5th — The 12-pounder cannonades on elephants
- 6th — The Dinagore Local Battalion
- 7th — The Rungpore Light Infantry
- 8th — The spare ammunition

Before advancing the officer commanding the advance guard was ordered to storm the stockade across the road, if he thought it could be carried, but if not, to turn into the jungles right and left and act as a covering party.

On arriving at the stockade it was found greatly strengthened and reinforced since Lieutenant Neufville was there, and the first fire of the enemy, who were entrenched, brought down more than half of the leading division, which caused a momentary check.

The advance guard then entered the jungle to the right and left of the road. The howitzers were then brought up, and after firing a few rounds of grape, an assault was ordered. Captain McLeod, with the right wing 57th Regiment and a detachment of the 46th, performed this duty. The enemy ran the moment our troops began to scale and break down the stockade. The stockaded tank on the right and a mosque on the left, about 400 yards from the fort, were occupied. Another party was detached to occupy another mosque on the right, by which means the south side of the fort was invested, and the enemy driven in at all points.

As the fort appeared an extensive place and full of guns and men, camp was pitched and the place reconnoitred. Two more guns were ordered from the fleet, and materials collected for a battery. Firing from the fort continued during the whole night, but had little effect. In the morning a messenger was received from the fort to negotiate terms for the surrender of Rungpore. And they were finally agreed to through the mediation of a Buddhist priest named Dhermadhai Brahmachari.

Such of the garrison as continued hostile were allowed to retire into the Burman territory on their engaging to abstain from any act of aggression on their retreat, the remainder were suffered to remain unmolested with their families and property.

The surrender of Rungpore and the dispersion of the Burmans terminated the regular campaign on the north-east frontier, but the lawless conduct of the Singphoo and other wild tribes on the eastern frontier demanded the active interference of British detachments throughout the remainder of the season, but no other operations of importance were carried on.

On the Sylhet frontier it was intended to march a formidable force through Cachar into Manipur. With this view a force of about 7,000 men was collected under Brigadier-General Shouldham, Commanding the Eastern Frontier. A road was constructed by the pioneers from Badrapur to Banskandy, on which General Shouldham with the artillery and 3rd Brigade advanced to Doodpatlee, there to await the arrival of carriage, cattle, and supplies. The country from Banskandy towards Manipur was a continual series of ascents and descents, the route being intersected at right angles by ridges of mountains running nearly due north and south, and mountain torrents swollen by every shower into deep rivers, and the soil was a soft alluvial mould, which the slightest rain converted into a plashy mire. After many fruitless attempts, which were continued through February and March, and during which many hundreds of bullocks and camels perished, it was found impracticable to advance the force into Manipur. The attempt was therefore abandoned and the force broken up.

These difficulties, which had obstructed the advance of a large force, were surmounted by a smaller one, and the Manipur levy under Gambhir Singh, which had formed a part of the abovementioned force, accomplished the purpose for which General Shouldham's division had been collected.

The Manipur levy numbered about 500 Manipuris and Cacharis, they were armed by the British Government, but wholly undisciplined. They were accompanied by Lieutenant Pemberton. They left Sylhet on the 17th of May, and gained the western boundary of the Manipur valley on the 10th of June. The Burmans fled wherever they were met, and finally evacuated the district. In this manner one of the objects of the campaign was accomplished, and Manipur cleared of the enemy by a few hundred undisciplined mountaineers.

Another part of the plan of this campaign was the employment of a

Arakan force, September 1824. powerful force on the side of Arakan. In the end of September 1824 an army of 11,000 men was assembled at Chittagong and placed under the command of Brigadier-General Morrison. A flotilla of pilot vessels and gun-brigs was attached to it under Commodore Hayes, and a numerous equipment of brigs, boats, and other craft was prepared on the spot by the Political Agent for the conveyance of men and stores along the coast, &c, &c.

The Burmans had concentrated such of their forces as remained in the province at the city of Arakan, which they carefully fortified according to their usual method. About 5,000 men were now here under the command of the Atwin Woon Maungza, an officer of distinguished intelligence and courage.

Although no hostile opposition was apprehended, yet the advance on Arakan was impeded by the same difficulties which had been found most formidable foes in every stage of the war. The country, thinly peopled and overrun with jungle, afforded no resources, and stores and provisions, as well as cattle and carriage, were brought from a distance and collected slowly with much labour and expense.

The land column advanced by the coast road, and experienced much delay and difficulty in crossing the rivers which intersect the coast.

Commodore Hayes entered the Great Arakan river on the 22nd February, and received information that some Mug chief-
British attack on the Cham and balls stockade at Khloung Peela, tains were confined at Chamballa, a stockade gar-
23rd March 1825 risoned by about 1,000 men. He determined to
attack them. Accordingly on the 23rd he advanced with the *Research*, *Vestal*,
and several gun-vessels, having on board one company of Her Majesty's 54th
Regiment. At 2 P.M. they came in sight of the enemy's works at Khloung
Peela, which immediately opened a heavy fire upon the *Gunga Saugor* and
Vestal, the leading vessels. The *Research*, getting within half pistol shot,
commenced a heavy cannonade and fire of musketry upon the stockade and
breastwork. On getting to the other end of the stockade with intent to
flank it and allow the other vessels to come into action, the Commodore found
his ship raked from forward by another and stronger battery and stockade, of
which he had no previous information, garrisoned by about 3,000 men. After
a severe engagement of two hours, the tide beginning to fall, the Commodore
was obliged to drop down the river. The *Research*, *Assceerghur*, *Asia*, *Felix*,
and *Isabella* took the ground and remained fast for several hours near the
batteries, but the enemy made no attempt to fire at or molest them.

The loss in this attack was severe, and amounted
Killed and wounded to—

Officers	Killed	Wounded
Men	2	
	4	31
Total	6	31

The following is a return of vessels engaged on
Return of vessels the 23rd March —

1	Hon'ble Company's ship "Research," Com- modore Hayes	10 10 pr carronades
2	Bombay cruiser "Vestal"	{ 6 12 pr "
		{ 4 12 pr long brass
3	Hon'ble Company's brig "Assceerghur"	{ 6 6 pr
		{ 2 12 pr carronades
4	" brig "Helen"	6 6 pr brass
5	" ketch "Trusty"	6 3 pr "
6	" steam gun vessel "Pluto"	{ 4 24 pr
		{ 2 6 pr
7	" gun pinnace "Osprey"	2 12 pr carronades
8	" gunboat "Gunga Saugor"	1 12 pr "
9	" large gunboat "Thames"	2 24 pr "
10	" gunboat "Africa"	1 12 pr "
11	" gunboat "Asia"	1 12 pr "
12	" transport "Felix"	
13	" transport "Isabella"	

Total 51 guns

Troops with the detachment

1 company Her Majesty's 54th Regiment	40 men
Detachments 10th and 16th Madras Native Infantry	170 "
Flotilla marines	100 "
Calcutta Militia	12 "
11th Regiment Bombay Native Infantry	18 "
Flotilla seamen	140 "

Total soldiers and sailors 488*

On the 24th March the army encamped on the southern bank of the Chabutta nala. The 25th was occupied in preparing to cross this and another higher up. These nalas being crossed at daybreak on the 26th, the force was formed into four columns—the right commanded by Brigadier Grant, the centre by Brigadier Richards, the left by Captain Leslie, and the reserve by Lieutenant-Colonel Walker.

The left column was directed to skirt the river and turn the hills on the enemy's right, the right and centre moved through the passes leading through the range. When the right and centre columns first moved towards the hills, no sign of the enemy could be discerned. At last a wild shout, followed by a scattered fire, announced a hostile force. In order to dislodge them, the light companies of the 26th, 28th, 49th, and 63rd Regiments were sent to clear the heights, which they quickly did, carrying several entrenched posts, whilst the column below, proceeding in a parallel direction, cleared an unfinished stockade. The passes were thus gained, and the army crossed the hills to their northern side, which opened upon an extensive plain intersected by several deep-tide nalas and skirted with jungle. The army bivouacked within a mile and a half of the enemy's principal post at Mahatee. The reserve and the artillery joined at midnight. On the morning of the 27th the advance was resumed.

The post of Mahatee was a peninsula protected in front and on the left by

Position of Mahatee.

broad rivers, and backed by high conical mountains. Deep entrenchments along the front, with *épaulements* to protect them from enfilading fire, and with stakes in the banks of the river, formed its defences, and the hills in its rear were covered with stockades and fortified pagodas. On the approach of the advance guard the enemy's artillery opened fire, but was soon silenced by our guns. The troops then descended to ford the river. The enemy did not await their crossing, but fled towards Arakan. A resala of horse, which had crossed further to the right, arrived in time to do some execution in their rear, and to prevent the destruction of the bridges on the roads leading to the capital. On the 28th the troops in rear and the flotilla with Commodore Hayes having joined, the enemy's position was reconnoitred, and at daybreak on the 29th the army proceeded to attack the defences of Arakan on its eastern front.

The defences on the eastern side were a connected series of stockades

Defences of Arakan

carried along the crest of a range of hills from 350 to 450 feet high, running parallel for some distance with the town immediately to the east and south of it, but extending considerably beyond the town and strengthened by escarpment, abattis, and masonry.*

One pass alone at its northern extremity led through the hills to the capital, and that was defended by the fire of several pieces of artillery and about 3,000 muskets. The strength of the enemy was estimated at about 9,000 men.

The ground in front was a long narrow valley entirely clear of underwood, and in depth not wholly out of the range of the enemy's artillery. Along the foot of the hills ran a belt of jungle, which partly screened the advance, and an uninterrupted piece of water extended, serving as a natural base. Above these the ground was clear and open as well to the enemy's fire as to the large stones they precipitated on the assailants who attempted to scale the summit.

Attack of position, 29th March 1825. The first attempt to carry the position was by a direct attack upon the pass. The assault (directed

by Brigadier-General MacBean) was led by the light company of Her Majesty's 54th Foot, 4 companies 2nd Light Infantry, light companies 10th and 16th Madras Native Infantry, Rifle Company and Mug levy, and 4 companies 16th Madras Native Infantry. The attempt to escalate failed in consequence of the steepness of the ascent and the well-directed fire and incessant rain of stones of the enemy. After a fruitless struggle, in which the sepoys and Europeans vied with each other in the display of cool determined courage, every officer being disabled, the troops were recalled.

A nearer observation of the enemy's defences showed that an attack on their right, as the key to the position, whilst their attention should be drawn by a continued fire to their front, was more likely to succeed.

Accordingly the 30th March was spent in the construction of a battery to play especially on the works commanding the pass, and on the 31st at daylight the guns opened and maintained during the day a heavy cannonade, which had the effect of checking, though not silencing, the enemy's fire. At 8 P.M. Brigadier Richards moved off with—

6 companies Her Majesty's 44th Foot
3 companies Her Majesty's 26th Native Infantry
3 companies Her Majesty's 19th Native Infantry
30 sailors under Lieutenant Armstrong
30 dismounted troopers

The hill was nearly 500 feet high, and the road by which the party ascended was winding and precipitous. A few minutes after 11 P.M. the Burmans discovered the advance, the whole camp was on foot in a moment. A yell from the Burmans was answered by a sharp fire for a very short period, and the point was gained.

On the next morning as soon as a 6-pounder, which had been got up the hill with some difficulty, had been brought to bear upon the enemy, Brigadier Richards advanced to the attack of the enemy on the adjacent heights, whilst a simultaneous movement under Brigadier-General MacBean was directed against the pass from below. The enemy, apparently panic-stricken, abandoned the hills after a feeble resistance, and the capital of Arakan was captured. Arakan stands on a plain, generally of rocky ground, surrounded by hills and traversed by a narrow tidal nala, towards which there is a prevailing slope. On the northern face another nala intervenes between the wall of the fort and the hills, and both these streams unite a little below the Baboo Dong hill. The space on which the town stands is nearly square, and the hills, allowing for natural roughness of outline, are nearly rectangular, here and there a few detached and separate little eminences are sprinkled about the plain. The fort stands in the north-west corner of this space, and consists of three concentric walls, with intervening spaces between the third and second and the second and inner walls, which form the citadel. These walls are of considerable thickness and extent, constructed with large stones.

Two of the four provinces of Arakan were thus cleared of the enemy, and Ramree occupied, 22nd March. Lieutenant-Colonel Hamptou, who commanded 1825 at Cheduba, determined to undertake the reduction of Ramree with a few of Her Majesty's 54th and European artillerymen, 520 men of the 40th Native Infantry, and the sailors and marines of the frigate. Owing to the treachery of the guides, who led the party into the jungle far from the stockade, the expedition was a failure. A detachment was now sent against Ramree and Sandoway, but on arriving near Ramree they were informed that the Burmans had evacuated the place. It was occupied without opposition on the 22nd.

After leaving a detachment at Ramree, General MacBean proceeded against Sandoway. The troops ascended in boats on the 29th, and reached the town on the 30th. Stakes had been planted across the river in various places and several stockades were observed, but no appearance of the enemy, who had withdrawn from all their positions in Arakan on hearing of the downfall of the capital.

The occupation of the entire province of Arakan fulfilled a chief object of the expedition, and as the Burmans apprehended an invasion in that direction, proved a seasonable diversion in favour of the Rangoon force.

It was not found practicable to carry into effect the other main purposes of the force—a junction across the mountains with Sir Archibald Campbell. A small force tried the Talak route, but finding it impracticable for troops returned. A more practicable route by Aeng was not discovered till after the war.

The rains had now set in and sickness broke out to an alarming extent. Fever and dysentery were the most fatal diseases, and all ranks suffered equally. At last it was necessary to recall the troops altogether, leaving detachments of them on the islands of Cheduba and Ramree and the opposite coast of Sandoway, where the climate appeared to be more favourable.

We now return to the operations of the army at Rangoon.

The capture of the stockades at Kokain on the 15th December was followed by the complete dispersion of the Burman army. Two or three small bodies were assembled on the Lye river at Mophi and Paulang, whilst Maha Bandoola retreated to Donabew, where he concentrated a considerable force, which he strongly entrenched.

Having been reinforced by Her Majesty's 47th Regiment, a detachment of rocket artillery, and a division of gunboats, Sir A. Campbell determined to advance upon Promé.

In order to clear his rear of the enemy, Colonel Elrington was despatched against the only remaining possession of the enemy in the vicinity of Rangoon, the old Portuguese fort and pagoda of Syiam. The Burmans were driven from this on the 11th of February, and the army was at liberty to commence its march.

In order to maintain communication with Rangoon uninterrupted, a considerable force must be left there and at different points on the line of march, and the navigation of the Irrawaddy was to be commanded by a numerous and well equipped flotilla.

Whatever carriage was required for baggage, artillery, and stores was procurable only by sea from Bengal and Madras. The Bengal cattle were found too small and feeble for effective field service, and the chief dependence was placed on those sent from Madras*. Still the whole number of available cattle was far from adequate to the transport of guns, ammunition, and provisions, and General Campbell was, therefore, obliged to reduce his force materially.

Everything being ready for the advance, Sir A. Campbell divided his force into two columns. With one about 2,480 strong he purposed moving by land, whilst the other (1,169) under General Cotton was to proceed by water to Tharawa, where it was intended the land column should reach the bank of the Irrawaddy, carrying on its way the entrenched post of Paulang.

A third column under Major Sale, numbering 780, was sent to Bassein, the people of which were reported to be friendly. After occupying the place, they were to join the main body at Henzada.

The rest of the force, nearly 4,000 effective men, was left in Rangoon under Brigadier McCreagh, who was to form a reserve column as soon as transport could be collected and follow the Commander-in-Chief.

The strength of the two columns was as follows —

Distribution of army

<i>Land Column</i>		Rank and file
Rocket troop		36
1st troop Horse artillery		93
Governor General's Body guard		523
European infantry		1,230
Native infantry		600
Pioneers		257
Total		2,468
<i>River Column</i>		
Rocket troop		12
Artillery (foot)		108
European infantry		700
Native infantry		250
Total		1,169
Grand Total		3,637

The flotilla consisted of 62 boats,* each carrying one or two pieces of artillery, and the boats of all the ships of war off Rangoon. The river column started on the 16th February 1825.

The land column under General Campbell marched on the 13th February, and proceeded along a narrow and difficult path a short distance from the left bank of the Lyne (Hlung) river and in a north-westerly direction. On the 17th the force reached Mophi, the Burmese garrison of which place escaped. Leaving Mophi on the morning of the 19th, the column reached Lyne (Hlung) on the 23rd and Sooneza on the 26th, where it halted two days. On the 2nd of March the force arrived at Thatawa (Sarawa) without sickness, the men keeping their health, although the weather was hot.

The water column reached Tusit on the 17th February, and destroyed three stockades newly erected, but unoccupied. On the 19th the advance arrived at Paulang. The body of the column then anchored, and General Cotton advanced to reconnoitre. It being too late to complete the reconnaissance, the light divisions anchored immediately out of gunshot. During the night some hot-rafts were launched by the enemy, but were kept off. On the left of Paulang is an outward stockade called Youthei, and opposite on the right bank was another named Mighee, and about a mile further up the river on the point of land formed by the river dividing was the very extensive stockade of Paulang. A point of land about 500 yards distant from the outer works was immediately occupied, and a battery of four mortars and 26-pounders erected under the direction of Captain Kerman. This opened fire in an hour after the order to form it had been received. The enemy fired from both their positions, but deserted them the moment the troops landed to assault. All the other works were found

* It is presumed that these were the war boats captured from the enemy which were cut down and turned into transport boats. The dimensions of the largest war-boats were as follows — Length 63 feet, breadth 12 feet 6 inches, depth 5 feet 6 inches, pulling 62 oars and carrying one 9-pounder.

deserted by the enemy. On the 23rd February the flotilla arrived at Yangon-chena, where the Rangoon river enters the Irrawaddy. This is about 77 miles from Rangoon, so that the rate per day would average 11 miles. The boats were towed by the steamer, while the vessels sailed. On the evening of the 5th all the vessels of the flotilla having arrived, next morning they took up a position two miles below Donabew. Here there was a succession of formidable stockades, commencing at the pagoda, and increasing in strength until completed by the main work, which was lofty, on a commanding site, and surrounded by a deep abattis. The guns appeared numerous, and the garrison were seen in crowds.

On the 7th instant 500 bayonets were disembarked one mile below the Attack of pagoda stockade. The men were formed into two columns Donabew, 7th March. of equal strength, and advanced steadily, a steady fire was opened from the guns and rocket battery. The enemy kept up a heavy fire till the last. The place was taken by storm, and about 450 of the enemy killed and wounded. Our loss was only 20 killed and wounded.

The second defence was 500 yards from the pagoda stockade, and the same distance from the main work from which it was distinct, though commanded by it. For the immediate reduction of this place two more 6-pounders, four 5½-inch mortars, and a fresh supply of rockets were brought up and placed in position at a house in advance of the captured work. The enemy kept close, inducing the supposition that he intended to reserve his strength for the large stockade. When it was presumed that a sufficient impression had been made from the batteries, 200 men advanced in two parties to the storm. A heavy fire was at once commenced from all parts of the face of the work, which caused the columns to diverge to the right of the point of attack. They got into a ditch filled with spikes and scraped so as to expose it to the fire of the work. All who tried to mount were knocked down, and after losing two officers and many killed and wounded, the party was directed to retire. The General resolved not to continue the attack until reinforced, the troops were accordingly re-embarked, and the flotilla dropped to Youngyoung. Our loss in this attack was—

	Killed	Wounded	Missing
Officers	2	3	0
Rank and file	14	94	1

On receiving news of this repulse, Sir A. Campbell, who was then at Nanghui, 26 miles above Tharawa, determined to retrace his steps and attack the post with all his strength. He accordingly returned to Tharawa, from which place the force had to cross the Irrawaddy with such scanty means as could be procured. A few small canoes were collected and rafts were constructed, and in the course of five days the passage of the whole division was completed, and the head-quarters established at Hanzada. On the 25th it arrived before Donabew, and communication being opened with the flotilla on the 27th, the place was at once invested. Batteries armed with heavy artillery were constructed without delay. The enemy made frequent attempts to interrupt their progress by frequent sorties from the work, and on one occasion seventeen elephants, each bearing a complement of armed men and supported by

* The stockade of Donabew extended for nearly a mile along the right bank of the Irrawaddy, its breadth varying from 500 to 800 yards. The stockading was composed of solid teak beams from 15 to 17 feet high, and placed as closely as possible to each other. Behind this wooden wall

a body of infantry, were ordered out by Bandoola. They were charged by the Body-guard and the Horse artillery and Rocket troop, and the mahouts being killed, the elephants made for the jungle, and the enemy for their stockades. The mortar and enfilading batteries opened on the 1st of April, and the breaching batteries on the morning of the 2nd, shortly after which

the enemy were discovered in full retreat. The entrenchments were immediately taken possession of, and it was discovered that Bandoola had been killed by a rocket.

The death of Bandoola was a severe blow to the Burmese cause. He was the chief instigator of the war, and in courage and readiness of resource displayed great abilities to maintain the contest. He was a low and illiterate man, who had risen to power by his bravery and audacity.

Immediately after the fall of Donabew, General Campbell resumed his former line of march on the east bank of the Irrawaddy. Leaving Donabew on the night of the 3rd, he arrived opposite Sarawa on the 7th, and crossed two regiments over in the course of the day by the boats of the Royal Navy, which had been sent ahead under Lieutenant Smith, H. M. S. *Alligator*. The remainder of the force was crossed the following day.

He was here joined by General McCragh and the Reserve, consisting of battalion companies of the Royal's and 28th Native Infantry from Rangoon, and a supply of elephants. From thence he pushed forward to Prome, the

Force arrives at Prome, 25th April 1825. Burman force falling back as the British advanced. The force reached Prome unopposed on the 25th April, and occupied the place without firing a shot. The weather, though hot, was not oppressive, and the troops were in good health and spirits.

The command of the lower provinces acquired by this position inspiring the people with confidence, they soon began to resume their usual avocations, and to form markets along the river, and especially at Prome and Rangoon, by which the resources of the country now began to be fully available for carriage and support. In the commencement of May the monsoon set in, and

the force went into cantonments at Prome. Previous to the rains the thermometer had risen in the

the old brick ramparts of the place rose to a considerable height, strengthening the front defences by means of crabs beams and affording a firm and elevated footing to the defenders. Upwards of 150 guns and swivels were mounted on the works, and the garrison was protected from the shells of the besiegers by numerous well contrived traverses and excavations. The whole was surrounded by a formidable ditch and abatis."—*Snodgrass*

"The character of Maha Bandoola seems to have been a strange mixture of cruelty and generosity, talent with want of judgment, and a strong regard for personal safety, combined with great courage and resolution which never failed him till death. The acts of barbarous cruelty he committed are too numerous to be related. Stern and inflexible in all his decrees, he appears to have experienced a savage pleasure in witnessing the execution of his bloody mandates. Even his own hand was ever ready to punish with death the slightest mark of want of zeal in those he had entrusted with commands or the defiance of any post. Still his immediate adherents are said to have been sincerely attached to him. Uncontrolled license to plunder and extort from all who were unfortunate enough to meet Bandoola's men may no doubt have reconciled them to their situation, and confirmed them much in their attachment to their leader. The management of a Burmese army for so long a period, contending against every disadvantage to which a general can be subjected, evinced no small degree of talent, while the position and defence at Donabew as a field-work would have done credit to the most scientific engineer. But it is difficult to account for his motives, or give credit to his judgment, in giving up the narrow rivers of Panlang and Lain, where a most effectual opposition could have been given, to fight his battle on the banks of the broad Irrawaddy, where the ground was favourable to the regular movement of disciplined troops. During the days of his prosperity Bandoola seldom exposed his person. In the battles of Rangoon and Kokien he was never under fire. But he did not hesitate, when circumstances required it, to allow himself to be hemmed in in Donabew, where he boldly declared he would conquer or die, and, till he actually fell, set his men the first example of the courage he required in all."—*Snodgrass*

shade to 110°, but the nights remained cool, and the climate was not found unhealthy. The monsoon brought with it its ordinary effects on the condition of the troops, but by no means to the same extent as in the previous season at Rangoon, the face of the country being mountainous and free from swamps.* While at Prome, news reached the force of the success of Major Sale at Bassein. We will now take up the account of that officer's operations.

After a tedious passage the force under Major Sale arrived off Pagan. Major Sale's expedition against goda Point, Great Negrais, on the 24th February. Next day a party was sent ahead in boats to reconnoitre, who discovered a stockade of the enemy. On the morning of the 26th the fleet anchored and sailed up the river, and Her Majesty's ship *Lorne* and the Hon'ble Company's cruiser *Mercury* after firing a few rounds cleared the stockade, and the troops landing entered without opposition and destroyed it. The next stockade was taken and treated in the same manner. On arriving at Bassein on the evening of the 3rd March, it was found that the enemy had deserted the place and burnt it. A reconnaissance was made as far as Lamin, 140 miles from Bassein, by 200 men of Her Majesty's 13th Foot and 100 Native infantry under Major Sale, who proceeded up the river in boats, bivouacking at night upon the banks. They encountered no opposition, and found the place abandoned, and returned to Bassein after an absence of fourteen days. Bassein continued to be occupied during the war, but Major Sale and the greater part of the force were recalled to Rangoon.

During this time our troops in Tenasserim had had a good deal of trouble with the Siamese, who made many kidnapping expeditions into Tenasserim. These were, however, put an end to speedily.

Immediately after the occupation of Prome, Sir A. Campbell detached Colonel Godwin with a force of—

800 infantry, | 1 troop Body guard,
2 field pieces,

to the eastward, on the route to Toungoo, to ascertain the state of the country and the strength of the enemy in that direction.

The force left Prome on the 5th May, and marched in a north-easterly course till the 11th, when, coming on a difficult and mountainous country, they turned to the left and moved to Meadav, 60 miles above Prome, on the Irrawaddy, which they found deserted. Thence they returned to Prome on the 21st instant. A stock of cattle was collected, but no grain, and the army had still to depend on Rangoon for supplies.

The months of June, July, and August were necessarily spent in inactivity, from the setting in of the rains and the prevalence of inundations.

The Burmese Government made strenuous efforts to raise a new army, and information was received at the end of June of the assemblage of a numerous army at Ava, but no overtures of peace were made.

In the meantime all the lower provinces were becoming habituated to the change of masters and yielding cheerful submission. A state of order and plenty succeeded desolation and anarchy, and from Bassein to Martaban and Rangoon to Prome every class of natives not only contributed their aid

* Wilson's *Burmese War*, page 67.

† Consisting of—		Rank and file.
Foot artillery		18
European infantry		267
Native infantry		500
Total		785

to collect such supplies as the country could afford, but lent their services to the equipment and march of military detachments.

The British general now made overtures of peace, and addressed a letter to the court of Ava declaring his desire to abstain from further hostilities, but although the war was undoubtedly highly unpopular, the queen and her brother, who possessed great influence with the king, were resolutely bent on the continuance of hostilities, and great exertions were made to collect a formidable force. As this was formed, it was stationed at Pagan, Malloon, Patanagó, and finally at Meaday, where the troops arrived in the beginning of August to the extent of about 20,000. The whole force was estimated

at double that number under the command of Burma force 50,000 Mema Bo. Besides, there were 12,000 at Toungoo under the Prince of Toungoo. To oppose them, General Campbell had at Prome something less than 3,000 effective men, and had ordered 2,000 more to join him before the opening of the campaign.

Hearing of the advance of the Burmese army, General Campbell despatched Brigadier-General Cotton on a steamer to reconnoitre.

The enemy were discovered on the morning of the 15th August at Meaday, on the left bank of the Irrawaddy. Just below this town a large nala runs into the Irrawaddy, and from the mouth of this the Burman force was ranged for a mile and a half up the bank of the main stream. There were several pagodas on the bank, most of them near the nala, all of which the enemy stockaded and entrenched. They also constructed a breastwork and ditch between them and the river to protect their boats, which to the number of four hundred were ranged underneath. They had also an outpost on the road leading to Prome, across the nala, where there were some pagodas which they had stockaded, and a breastwork on the side of the hill which would command the road.

At this time a reply to a letter addressed by Sir A. Campbell to the Minister was received, and for some time it seemed as if peace would be concluded. On the 2nd October Sir A. Campbell, assisted by Sir James Brisham, commanding the naval force, met the Burmese commissioners at Newben Zenk. The first day was, at the request of the Burmans, given up to private friendship, and business deferred until next meeting. On the following day the meeting took place. There were present on the British side Sir A. Campbell, Sir J. Brisham, Brigadier-General Cotton, Captain Alexander, Brigadier McCleagh, Lieutenant-Colonel Tidy, and Captain Snodgrass.

On the part of the king of Ava seven chiefs were present.

The principal conditions proposed by the English commissioners were the non-interference of the court of Ava with the territories of Cachar, Manipur, and Assam, the cession of the four provinces of Arakan, the payment of two crores of rupees, and to receive a British Resident at the capital.

These lenient terms were, however, refused, and the court of Ava prepared to prosecute the war.

It was known that a large force had assembled along the line of the river between Ava and Meaday. There was nothing to apprehend from a direct attack, but any serious movement on either flank might have been inconvenient. To oppose an advance on the right, Colonel Pepper was stationed in Old Pegu, whilst it was thought the detachment at Bassein would be sufficient check against any annoyance from this quarter.

The following is from a Burmese report of the distribution of the Burmese army in Moboung —

Place	Men	Commanded by
Between Meaday and Moboung	4,000	Poundo la.
Meaday Point	6,000	Kion kam boh
	9,000	Pinzala Bo
	9,000	Mahake Meah
Kee-mie gow, near it	3,000	A female chief
	7,000	Shan chief
	3,000	Cassay chief
	900	Shan chief
West bank at Meazagine	6,000	Sadawoon.
	49,000	

The enemy had now advanced as far as Wattigoon, 20 miles from Prome, from which place Sir A. Campbell determined to drive them. Accordingly Colonel Macdonell with two brigades Madras Native infantry marched to attack the post from the left, and Major Evans with the 23rd Native Infantry was ordered to move on the front of the position and attack in concert with the main body, whilst the 18th Native Infantry was advanced to support the 22nd, if necessary. The 38th Native Infantry was sent round by Saagee. Owing to the state of the roads, artillery could not accompany the column. The result of this attempt was disastrous. The Burmese were encountered in great force, and although forced to fall back, kept up a destructive fire as they slowly retreated to the works in their rear, which proved too strong to be carried by storm without the aid of artillery. After a severe loss in killed and wounded the British had to retire, followed by the enemy in great numbers. The detachment under Major Evans was also unfortunate, and had to retire with severe loss. The total loss on this occasion was—

	Killed.	Wounded
Officers	1	13
Rank and file	53	150 and missing
	54	163

The cause of this disaster was evidently a want of information as to the enemy's strength. Instead of 2,000 or 3,000, as was supposed, there turned out to be no fewer than 5,000 opposed to Major Evans, while those engaged with the main division were estimated at 10,000 or 12,000 men. Elated by their success, the Burman generals now showed an intention to attack the British position. General Campbell determined to await their advance, and the enemy soon appeared round Prome to the number of 50,000 or 60,000 men.

The enemy's position to the east of the Irrawaddy extended from the Napadee hills (a commanding ridge on the bank of the river) to the villages of Simbike and Simbeh, about 11 miles to the north-east of Prome. The Burman army was divided into three corps. The right formed on the western bank of the river, the centre on the hills of Theybu or Napadee, and communicated through a thick forest by a line of posts with the left. The divisions were all strongly stockaded, and occupied positions difficult to approach.

The effective British force at this time at Prome consisted of eight weak British regiments, six battalions Madras Native infantry, one troop Dragoons, and a considerable

train of horse and field artillery, leaving, after garrisoning Prome, a field force of about 5,000 men, of which 3,000 were British

Three corps of Native infantry and a Company's European regiment were opposed to Sykia Woongee in Pegu, with orders to advance on Toungoo if possible, and Rangoon was occupied by a British Regiment and a considerable force of Native infantry

After awaiting some days the expected attack of the Burmese force, General Campbell, finding that they were reluctant to quit the cover of the jungle and continued to harass the country, determined to make a general attack upon every accessible part of the enemy's line to the east of the Irrawaddy

On the morning of the 1st December General Campbell, leaving four regiments Native infantry for the defence of Prome, marched with the rest of the force against the enemy's left, whilst the flotilla under Sir J. Brisham and the 26th Madras Native Infantry, acting in co-operation, commenced a heavy cannonade on the enemy's centre, and continued nearly two hours to attract his chief attention to that point

On reaching the Naurn river at the village of Zo-ouke, the force was divided into two columns. The right under Brigadier-General Cotton, proceeding along the left bank of the river, came in front of the enemy's entrenchments, consisting of series of stockades covered on either flank by thick jungle and by the river in the rear, and defended by a considerable force, of whom 8,000 were Shans under their native chiefs

The post was immediately stormed. The attack was led by Lieutenant-Colonel Godwin with the advanced guard of the right column, consisting of—

Her Majesty's 1st Foot	202
Flank companies Royal Regiment at 50	100
Flank companies 89th Foot at 50	100
	<hr/>
	402*

amounting to about 500 rank and file, supported by the 15th Madras Native Infantry, and the stockades were carried in less than ten minutes

The enemy left three hundred dead, including their general Maha Now, and all their stores and ammunition, and a considerable quantity of arms were taken. The left column, under the Commander-in-Chief, which had crossed the river lower down, came up as the fugitives were crossing, and completely dispersed the Burman army

Following up the advantage thus gained, General Campbell determined to attack the Kyce Woongee in his position without delay. The force accordingly marched back to Zeouk, where they bivouacked for the night, and resumed their march the following day. The nature of the country admitted of no approach to the enemy's defences upon the hills, except in front, and that by a narrow pathway accessible to but a limited number of men in line, and commanded by artillery. Their posts at the foot of the hill were more open, and from these they were at once driven. Artillery and rocket fire was opened on the heights, and after some impression had been made the 1st Bengal Brigade, consisting of—

Her Majesty's 13th Foot, | Her Majesty's 38th Foot,

advanced to the assault, supported on the right by six companies of Her Majesty's 87th

They ascended in face of a heavy fire, to which they scarcely returned a shot, and when they had gained the summit drove the enemy from hill to hill, until they had cleared the whole of the formidable and extensive entrenchments

Our loss in these actions was —

	Killed.	Wounded	
Officers	3	2	(in the action of the 1st)
Officers	3	6	(in the action of the 2nd)
Total	6	8	
Men	17	49	(in the action of the 1st)
Men	11	72	(in the action of the 2nd)
Total	28	121	

After this action Sir A. Campbell immediately advanced in pursuit of the retreating enemy. As it was known that the enemy had fortified the position along the river from Meaday to Paloh, and had strengthened them with great labour against the direct line of attack, General Campbell determined to move against them circuitously with one division of his force so as to turn them as high as Bolly, whilst another division proceeded along the river communicating and co-operating with the flotilla. Of the 1st Division he took the command himself, the second was placed under Brigadier-General Cotton, and the flotilla under Commodore Brisham, having a military force on board under Brigadier Armstrong. General Campbell marched on the 9th December to Wattygon, a heavy fall of rain lasting 30 hours, rendering the roads impassable, injuring a considerable quantity of commissariat stores, and inducing extensive sickness amongst the troops, detained the column. Cholera in particular appeared both in this and General Cotton's column, but did not last long. The column did not reach Bolly till the 16th instant, when it came into communication with the other columns. General Campbell now pushed on to Tabboo with the advance, being informed that the enemy had abandoned Meaday. The Body-guard was detached in pursuit, and overtook the Burman rear guard about five miles beyond Meaday.

Meaday occupied, 19th December 1825

General Campbell fixed his head-quarters at Meaday on the 19th December

General Cotton's division reached Meiong on the Irrawaddy on the 14th, and halted at Sembow on the 16th. On the 18th they arrived at Ing-gown Between Peumbi-han and Pulho the column passed a strongly stockaded position, which the enemy had abandoned. This extended a mile and one furlong, the works towards the river were well adapted for defence, and the whole commanded by stockades on the hills to the rear with abattis and entrenchments.

At a short distance from Meaday it became necessary to halt the European part of the force, owing to a failure in the supply of animal food. Sir A. Campbell, however, moved on with the Madras Division towards Malloon. The flotilla also proceeded on its route. On the 20th December the Burmese generals sent a flag of truce expressing a desire to make peace. Two British officers were deputed to ascertain the intention of the Burmans, and meanwhile the army continued its march to Patanagó, opposite to the Burmese entrenchments at Malloon, and encamped there on the 29th. The flotilla also ascended the river and anchored above the Burman lines without molestation.

In the communications that ensued, Sir A. Campbell was assisted by Mr Robertson, the Civil Commissioner in Pegu and Ava, who had been appointed to the general superintendence of the civil affairs in the provinces under British authority, and to the conduct, jointly with the Commander-in-Chief, of political intercourse with Ava.

On the 30th December the Commissioners of both nations met, and the terms proposed on the former occasion were acceded to. The English copy of the treaty was signed on the 2nd and the Burmese on the 3rd of January 1826, and fifteen days were allowed for its ratification by the king. On the 18th, the day appointed, it became evident that the Burmans had no intention of acting honestly, and it was therefore determined to recommence hostilities at once. Accordingly by 10 o'clock next morning 28 pieces of ordnance were in position, and at 11 o'clock they opened fire on the enemy's position. During this period the troops intended for the assault were embarking in the boats of Her Majesty's ships and the flotilla at a point above the encampment. The dispositions for the attack were thus reported by Sir A. Campbell: "About 1 p.m. the desired impression having been produced

by the cannonade, and everything reported ready, I directed the brigade under Lieutenant-Colonel

Sale, consisting of Her Majesty's 13th and 38th Regiments, to drop down the river and assault the main face of the enemy's position near its south-eastern angle, and Brigadier-General Cotton with the flank companies of Her Majesty's 47th and 89th Regiments, and Her Majesty's 89th Regiment under Lieutenant-Colonel Hunter Blair, Her Majesty's 41st Regiment and 10th Madras Native Infantry under Lieutenant-Colonel Godwin, and the 25th Madras Native Infantry and flank companies of 43rd Madras Native Infantry under Lieutenant-Colonel Pailly, to cross above Malloon, and, after carrying some outworks, to attack the northern face of the principal work. Although the whole of the boats pushed off together from the left bank, the strength of the current and a strong wind from the north carried Colonel Sale's brigade to the point of attack before the other columns could reach the opposite shore. Colonel Sale was wounded in the boat, but the corps of his brigade having landed and formed with admirable regularity, rushed on to the assault, and were in a short time complete masters of the work."

Seeing the success of this assault, Brigadier-General Cotton ordered his troops to cut in on the enemy's line of retreat, which was done with much effect.

The enemy's loss was severe, and on our side as follows —

	Killed	Wounded
Officers	0	9
Men	9	31

The Burmese army defeated on this occasion numbered upwards of 15,000 men.

The copies of the treaty signed and sealed as they had been at the meeting were found in the house of Prince Memia Bo, and also from 30,000 to 40,000 rupees. "Memia Bo and his beaten army," says Major Snodgrass, "retired from the scene of their disasters with all possible haste, and the British Commander prepared to follow him up without delay."

The army left Patanagó on the 25th January, and reached Pagan-ngay on the 4th February. On the 8th the force had arrived close to Pagan-myo. A reconnaissance made the same evening discovered the enemy in force and strongly posted about 5 miles in advance of the village of Yesseah.

General Campbell learned from the Burmese prisoners that the enemy had resolved to defend two positions, one having for its *point d'appui* the Logoh-Nunda pagoda, the second within the old walls of the city, which had been repaired the former to be occupied by 7,000, the latter by 9,000 men. It was determined to attack these on the morning of the 9th, and General Cotton, who was in rear, was ordered to join the advance column with three of his corps in the morning. At 9 o'clock the united force marched.

Four miles from camp the enemy were found, for the first time since the commencement of the war, prepared to dispute the ground in the field. General Campbell thus describes the action —

"The road from Yesseah to Pagan leads through a country much overgrown with prickly jungle, which, whilst it renders it difficult for regular troops to diverge from its direct course, is in some places so

Action of Pagan myo, 9th
February 1826

thick as completely to mask the formations and other manœuvres of large bodies. The Burmese general, availing himself of these advantages, and ignorant of the reinforcements received, drew up his army in the form of a crescent, both wings being considerably advanced, and the main road running through its centre. He was instantly assailed on both flanks. Her Majesty's 13th Light Infantry led the right attack, accompanied by four guns Bengal Horse Artillery and a small detachment of the Body-guard, supported by Her Majesty's 89th Foot, the 38th Foot on the left, supported by Her Majesty's 41st and two guns Madras Artillery under General Cotton, whilst Lieutenant-Colonel Parlbay with the 43rd Madras Native Infantry advanced on the bank of the Irrawaddy, our extreme left, to prevent the enemy throwing troops to our rear in that direction. They received our attack on both flanks tolerably well formed and with a show of resolution, but soon gave way before the rapid fire and steady charge of British soldiers.

"Part of their troops, broken by the 38th, retired to a well constructed fieldwork, but were so closely pursued that they had not time to form for its defence. Here three or four hundred of them perished. Several times during the day they attempted with their cavalry to turn our right, and watched every opportunity which might offer to effect this purpose. The first of the enemy's positions being thus carried, the troops were reformed, and after a short halt led to the attack of the second, which they soon forced without much opposition."

Our loss throughout the fight, although of five hours' duration and continued over 4 miles of ground, was comparatively small—

	Killed	Wounded
Officer	0	1
Rank and file	1	16

While these events were occurring on the Irrawaddy, the province of

Operations in Pegu Pegu had been the scene of some operations, which must here be noticed. Towards the end of

1825, the Burmans under a chief named Upma had become daring and troublesome, and occasioned much mischief and alarm. In order to check their incursions, Colonel Pepper moved from Pegu on the 23rd December and marched to Shway-gyeen, which he occupied without resistance. A party of 150 men was posted at Mikow, and Lieutenant-Colonel

Repulse of Colonel Corry

Corry with the 3rd Light Infantry was detached to reduce Sittang. He reached this place on the 7th January, and immediately

commenced the attack, which from the inadequate number of the attacking force and the strength of the place entirely failed, with a loss on our side of—

Officers Rank and file	Killed	Wounded
	9 2 — 11 —	2 18 — 20 —

On hearing of this repulse, Colonel Pepper moved out with a reinforcement of the 12th and 54th Regiments Madras Native Infantry, the flank companies of the 1st European Regiment, and a small detachment of artillery, and on the 11th January reached Sittang.

The stockade was found of great extent, built entirely of teak timber, from 12 to 14 feet high, and it was constructed on an eminence which commanded every approach the north face was protected by a creek fordable only at low water. After reconnoitring the place it was ascertained that the creek would be fordable at low water. Pending the time when he would be able to ford it, Colonel Pepper got his guns* into position and opened a fire of shot and shell on every point. The columns of attack were then formed as follows—

			Rank and file
Right column—Major Home, 12th Madras Native Infantry	{ Light company 12th Madras Native Infantry, with 2 ladders	}	36
Centre column—Captain Stedman, 34th Madras Native Infantry	{ Light company 1st Europeans, Headquarters 34th Madras Native Infantry, and 2 ladders	}	90
Left column—Captain Cursham, 1st Europeans	{ Grenadier company, Headquarters 3rd Madras Native Infantry, with 2 ladders	}	164 42 200

At 2 P.M., the water having subsided sufficiently, the left column, which had to make a detour to the left and rear of the place, proceeded, and having reached its position, and the right and centre columns having been previously instructed to what point their attack should be directed, the advance was sounded for the whole to storm simultaneously, and in less than 20 minutes we were in full possession.

The fire of the enemy was most heavy and destructive, and the obstacles of no common order, every man having been up to his neck in water while crossing the creek. Our loss was great—

Officers Rank and file	Killed	Wounded
	3 9 — 12 —	4 13 — 17 —

Shortly after the reduction of this stockade Colonel Pepper was joined by strong reinforcements from Rangoon, consisting of—

4 companies Her Majesty's 45th Foot	Details 3rd Madras Native Infantry
7 companies 1st Regiment Madras Native Infantry	Details 34th Madras Native Infantry

In all 800 (P).

The enemy did not relax, and in February made a vigorous attack on the British post of Mikow. The attempt was gallantly repulsed, and a reinforcement was sent to the place. The establishment of peace suspended further operations in Pegu.

* One 6-pr and 1 howitzer 4½"

No occasion had offered for the prosecution of further hostilities in

Operations in Manipur

Arakan and Assam, and those provinces continued in the undisturbed possession of the British authorities. It was not until about this time that Manipur was finally cleared of the enemy. The Rajah Gambhir Singh was furnished with a supply of provisions and arms, and, accompanied by Captain Grant and Lieutenant Pemberton, set out for Manipur with the levy. They arrived in Manipur on the 18th December 1825, but met no Burman force. A considerable body, however, were stockaded at Tummo, against which a detachment was sent. It was captured, and the Burmans cleared out of Manipur territory.

We now resume the narrative of the Irawaddy Valley campaign.

After halting two or three days at Pagan, General Campbell resumed

Sir A. Campbell advances on his march on Ava. The king and his ministers felt they were in the power of the British, and their only anxiety was that the personal dignity and security of the sovereign should not be violated. It was, therefore, with much surprise they learnt that the British commissioners sought to impose no severer terms than those named at Malloon. To this they had no objection to accede, but as no official ratification of the treaty was brought, Sir A. Campbell declined to halt, and the army advanced as far as Yandaboo, within four days' march of Ava. Here the ratified treaty was brought, and 25 lakhs, the amount of the first instalment, was brought in gold and silver bullion.

On the 5th of March the troops commenced their return, the greater part

Return of army

proceeding by water to Rangoon. One battalion, with all the elephants and attended by two Burmese chiefs, proceeded from Sombawgye to Arakan *via* Aeng pass. Another detachment proceeded from Prome to Sandoway.

Remarks on the campaign

The experiences of the first Burmese war bring the following points prominently to notice —

1st — The troops at first suffered greatly from sickness. This was due partly to the rains, but chiefly to bad food and insufficient shelter, for we find that as soon as arrangements were made for a proper supply of wholesome food, and barracks were built, the sickness at once diminished.

2nd — Hospital ships were established at the mouth of the river, and convalescent stations at Meigun and Tavoy, with beneficial results, especially from the latter.

3rd — The navy took a prominent part in the attack of all places on the river.

4th — Want of transport retarded the movements of troops more than local difficulties.

5th — The Intelligence arrangements appear to have been most defective, nearly all the reverses we met with were due to want of information (see note).

6th — Much of the success gained was due to the powerful train of artillery which accompanied the army. The guns of the river column, mostly 12 and 24 pounder caronades, were embarked in sixty boats.

7th — The admirable skill and judgment which the Burmans show in the construction of stockades, the great strength of these works, and the rapidity with which they are constructed, are forcibly commented on by the General Commanding.

8th — The natural bravery of the Burman, and the obstinacy with which he fights when behind cover, is also noteworthy.

9th—Rockets, or "devil sticks" as the Burmans style them, were most effective in the first Burmese war, and from their lightness they can be rapidly brought into action when there may be a considerable delay in bringing up the guns

10th—Laurie in *Our Burmese Wars* remarks that in the event of another Burmese war, a corps of Pegu mounted rifles would be very useful, but, in any case, "no operations should take place without a tight little force of irregular cavalry, like the Nizam's, or those which were employed in Central India. Such troops are always invaluable in jungle warfare, as they can act under all circumstances"

In the first Burmese war the Governor General's Body-guard was of great use, and General Campbell regretted he had not more cavalry at his disposal

If cavalry were useful in Pegu, where the country was covered with jungle and intersected by rivers, much more useful would they be in Upper Burma, where rolling alluvial plains are met with and little jungle

Observations on the attack of stockades, &c

In all the attacks on stockades which are described in this war it is to be observed that in no instance was there a want of success when the commander was duly careful and mindful of the rules of war, and the troops delivered the assault with spirit and determination. When the attacks were unsuccessful, the causes are distinctly traceable to a want of foresight on the part of the commander, or to his ignorance of the movements, strength, and position of the enemy. The different degrees of obstinacy with which the Burmans defended their positions on different occasions is also to be noted. On some occasions they were seized with a panic and fled as soon as our soldiers rushed to the assault, on others they held their works with a courage and determination most praiseworthy. If they were attacked before their works were completed, they invariably retired, but when allowed time to complete them, they generally fought well

The following causes of failure may be instanced —

- 1st**—Ignorance of the position and strength of the enemy
- 2nd**—Want of information as to the state of the roads, uncertainty of support and as to supplies
- 3rd**—Flotilla mistakes a column sent to assault stockade for the enemy, and pounds it with artillery
- 4th**—Assault delivered in half-hearted manner, troops checked by obstacle, kept there some time, and then retired
- 5th**—Troops not supported

Intelligence arrangements, Assam Force

Note—Lieutenant Neufville, in charge of the Intelligence Department in Assam, is said to have contributed, by the accuracy of his information, much to the success of the operations. The commander of the troops in Assam was well informed of the movements and position of the enemy

In illustration of the above, a few of the failures in attack may be mentioned

On the 5th October the force sent from Rangoon under Colonel Smith against the stockade of Tadaghee consisted of 1,140 men (natives) and four howitzers. They arrived before the stockades, the position and nature of which, as well as strength of the enemy, was quite unknown late in the afternoon, and

the attack was made without previous reconnoitring. The Assam force checked in March 1824, owing to defective information as to the state of the country and roads, &c., although the fairest prospect was

offered of expelling the Burmans from Assam even by a partial advance

The expedition against the stockade of Kemmendine fails 13th June 1824.

Communication not maintained between advancing columns

The land column after a fatiguing march on nearing the stockade are mistaken by the flotilla for a body of Burmans and heavily cannonaded

Communication should have been maintained between the two columns

Colonel Bowen's force in February 1824 attacks Doodpatlee The place

Attacking force checked, &c.

is insufficiently reconnoitred, and the troops are checked by an unexpected obstacle, where they receive a heavy fire from the enemy

After being exposed to this for some time, and as it appeared with no hope of advantage, the attempt was abandoned

The disaster at Ramoo has been commented on before (page 28) It need

Troops not supported

only be remarked here that had the small detachment under Captain Noton been reinforced with

reasonable dispatch, the disaster would not have occurred The force amounted to 1,000 men, and the officer commanding showed a great want of enterprise in allowing the Burmans, who only numbered 8,000, to surround him

Contrast with the above the action of 28th May, when Sir A. Campbell with three companies not exceeding 200 men* stormed two stockades manned by 7,000 Burmans In attacking Burmese stockades attention should be paid to the following points —

1st — The work itself and the adjacent ground should be carefully reconnoitred

2nd — It should be well battered with shot and shell and raked with rockets before the troops are ordered to the assault

3rd — An assault having been determined on, the supports must be crammed on after the stormers that there may be no check, for it must be remembered that, however great the loss in an obstinate assault may be, it cannot be so great as in the event of a retreat

4th — Simultaneous assaults on two or more parts of the works are most successful

5th — If possible, the assault of a work should not be left to natives alone, but a certain number of European troops should be with them

6th. — Should it not be possible to bring artillery to bear on a work, it can be taken without it, for brave and determined troops have stormed the strongest works, trusting almost entirely to the bayonet

SECOND BURMESE WAR

The treaty of Yandaboo guaranteed the security of our merchants and commerce There was to be no oppression of British subjects, the merchants residing in Rangoon were to be liable to no inordinate exactions, and it seemed

as if the intercourse between the Burmans and British was established on a firm and friendly basis

* Europeans.

It was not till four years after the treaty of Yandaboo had been signed that Diplomatic relations with Ava, the British Government took advantage of the 1830 to 1838.

first article of the treaty and deputed a Resident to the court of Ava. In 1830 Major Burney went there as the first Resident, and in 1838 Colonel Benson succeeded him. He was treated with much incivility, and was placed on an island in the Irrawaddy without provisions till the river rose and threatened to swamp him and his suite. The Government therefore withdrew their representative.

King Tharawaddy hid throughout his reign treated our engagements with the Burmese Government as waste paper, and the viceroys of Pegu

Burmese exactions from him, ever since 1837, recommenced those exactions from British traders.

tions from traders which had so often provoked remonstrances from the British Government. For several years complaint after complaint was sent to the Government of India, of which, as there was no Resident at the capital who might remonstrate with the authorities, no notice was taken. At last in 1851 the governor of Rangoon, one Moung-toog, imprisoned the master of a British ship without cause, and after liberating him fined him Rs. 410, and imposed a second fine of Rs. 500. The crew of his ship were imprisoned, and some beaten and one ill-used. Again in the same year the governor unjustly fined and ill-used the master of the bark *Champion*. These outrages being brought to the notice of the Governor General Lord Dalhousie, under his instructions Commodore Lambert was deputed to Rangoon with Her Majesty's ships *For*, *Serpent*, and *Hermes*, and the steam vessels *Tuamoo* and *Proserpine* of the Hon'ble East India Company's Bengal Marine. Soon afterwards the steamer *Phlegethon* was added to the squadron. The instructions given to the Commodore were to address a note to the governor of Rangoon calling attention to the breach of treaty which he had committed and his various acts of oppression, and to demand pecuniary compensation. Should the governor refuse to comply with the demand, the Commodore was then to forward to the king of Ava a letter from the President in Council. In this letter it was demanded that the governor should be dismissed, and it went on to say that if the Government of India should be disappointed in its first expectations, it would feel itself called upon to take immediate measures to protect the interests of British subjects and vindicate its own honour and power.

When the British squadron appeared at Rangoon, the governor issued orders that no European should on pain of death communicate with it. The Commodore demanded an interview, but as it became known that Moung-toog intended to seize as hostages the officers who might attend at it, and threaten to put them to death if the squadron did not at once leave, the Commodore determined to withhold his demand on the governor, and at once forwarded the letter to the king of Ava calling for a reply in thirty-five days.

The reply was duly received, but contained only frivolous excuses, and it soon became evident that the arrogance of the court had again reached its former height, and that the king was determined once more to measure his strength with the British. The old governor was removed, but departed for Ava with an enormous retinue and a fleet laden with the plunder which he had accumulated during his term of office, and with every mark of honour.

The new governor did not inform the Commodore of his arrival, and he issued the same notice as his predecessor, threatening death to any European who should communicate with the squadron. At last the Commodore sent two officers on shore with a letter to the governor. Nothing could exceed the

insolence with which this deputation was met. The officers were refused admittance, and after a long delay were compelled to retire from the door without having delivered the Commodore's letter.

Commodore Lambert at once declared the blockade of the rivers, and, in retaliation for the insults offered to the British Government, seized a royal ship and proceeded down the river, having previously taken on board such British subjects as wished to leave. The *Fox* anchored opposite the great stockade. The Burmese opened fire, which was returned by the *Fox* with shot and shell. The Burmese battery was soon silenced, and the war-boats on shore destroyed by the boats of the *Fox* and *Phlegathon*. Meanwhile a stockade on the opposite bank opened fire on the *Hermes*, but her heavy guns and a few rockets soon put an end to the Burmese firing.

When these events were communicated to the Government, another attempt was made to avert war, and a letter sent to the king of Ava calling on him—

1st, to apologise for the insult offered to the British officers at Rangoon,

2nd, to pay an indemnity of one million rupees,

3rd, that the British agent at Rangoon should be received with due respect,

4th, the governor of Rangoon to be removed.

Failing the fulfilment of these conditions on or before the 1st April, he was informed that immediate war would be declared.

On receipt of this letter the Burmese Government at once commenced preparations for war.

The Governor General, warned by the first war, took immediate steps after the despatch of his letter for ensuring that the force to be employed against Burma in case the king refused to accede to the demands made should be in the field of action by the 1st of April, so as to be able to commence hostilities immediately after that date. By the 23rd March some of the troops from Bengal had left, and the rest were ready to embark. General Godwin, C.B.,* had been nominated to command, and the staff appointments had been filled up.

The land force consisted of the following troops —

Bengal Division

18th Royal Irish	40th Bengal Native Infantry
80th Regiment (wing)	67th Bengal Native Infantry

Madras Division

51st King's Own Light Infantry	26th Madras Native Infantry
9th Madras Native Infantry	5 companies artillery with 16 guns
35th Madras Native Infantry	2 companies Sappers and Miners

making a total, exclusive of artillery, of 5,250. These troops were conveyed in twelve transports.

The fleet destined to co-operate under the command of Rear-Admiral Austen, C.B., was composed of—

Her Majesty's ships

	Men.	Guns
"Rattler" (Flag ship), Commander A. Mollish	130	11
"Fox" " " Lambert	298	40
"Hermes" " " Fishbournes	120	6
"Salamander" " " Ellman	135	6
"Serpent" " " Louard	125	16
Gunboat	10	1
	818	80

* General Godwin was invested with full diplomatic authority.

Steamers of the Indian Navy.

		Men.	Guns.
"Feroze,"	Captain Lynch	230	7
"Muzuffer,"	Commander Hewett	200	7
"Zenobia "	" Ball	230	7
"Sesostris "	" Campbell	136	4
"Madura,"	Lieutenant Frazer	60	5
"Berenice "	" Nisbett	97	1
		<hr/> 952	<hr/> 31

Uncovenanted Service

"Tenasserim,"	Captain Dickey	80	6
"Pluto "	" Hurbank	86	7
"Phlegethon "	" Neblett	86	6
"Proserpine "	" Brooking	88	6
"Enterprise "	" Fryer	70	2
"Fire Queen "	" Boone	70	2
"Mahamuddee,"	Lieutenant Rice	22	4
		<hr/> 500	<hr/> 33
Total 19 ships of war		<hr/> 2,270	<hr/> 144

By March 23rd a wing of the 18th had sailed to rejoin head-quarters at Moulmein, and a wing of the 80th had also proceeded thither, the remainder of the Bengal Division and the Madras Division being in readiness to sail on the 25th for the rendezvous in the Rangoon river.

Finding on his arrival there, on the 2nd April, that the Madras Division had not made its appearance, General Godwin, after ascertaining that no letter had arrived from the king of Burma, resolved to proceed to Moulmein to make arrangements for the capture of Martaban.

Accordingly Her Majesty's steamers *Hermes*, *Rattler*, and *Salamander* left the Rangoon river at daybreak on April 3rd, arriving at Moulmein the next day at noon, and before night the troops, consisting of a wing of Her Majesty's 18th Regiment, a wing of Her Majesty's 80th Regiment, a wing of 26th Madras Native Infantry, with detachments of Bengal European Artillery and Madras Sappers, in all about 1,400 men, were embarked and on their way to Martaban.

Martaban stands on a noble sheet of water, and had at that time a line of river defences of about 800 yards. Inland lies a large pagoda, a wall running along the whole front, with an ascent from the water's edge of about 500 feet, on the top of which small pagodas stand, the slopes being partially covered with fine trees and close jungle.

At daybreak on the 5th fire was opened by the flat on the defences, in which

Capture of Martaban, 5th April 1852 the commander of the *Rattler* especially distinguished himself, working his ship within 200 yards of the wall. By 7 A.M. the troops under command of Lieutenant-Colonel Reynolds, 18th Regiment, were in the boats, and an hour later all the defences were in the hands of the British. Our loss was seven European rank and file and one havildar wounded. The 26th Madras Native Infantry and one company European artillery were left in garrison, and the General with the remainder of the troops returned to Rangoon river, where he found that the Madras Division had arrived. On the 10th April the fleet and troops proceeded up the river, and anchored below the Hastings shoal. On the 11th the ships crossed the shoal, and on the *Feroze*, *Muzuffer*, and *Sesostris* taking up their

positions, fire was opened on them from both sides of the river. This was returned shot and shell, and a magazine in a stockade mounted with well-planted 18-pounders was blown up and the stockade destroyed. A company of the 18th Royal Irish and a party of seamen and marines landed on the Dalla side under fire of the ship's guns and stormed three stockades, from which they drove the enemy. The *Serpent* and *Phlegethon* then passed up the river and anchored opposite Kemmendine, whilst the *Rutler* and *Tenasserim* succeeded in silencing three more stockades.

The landing of the troops commenced on the 12th April at 4 A.M. under a well sustained fire from the steamers. By 7 A.M. the 51st King's Own Light Infantry, 18th Royal Irish, 40th Bengal Native Infantry, and part of the artillery were landed and commenced the advance. On reaching some rising ground on the right, heavy guns were opened on them, and, to the surprise of all who had served in the first war, strong parties of skirmishers appeared on the flanks of the advancing column. A battery of four guns at once opened on the stockade on the right, and a storming party, consisting of four companies of the 51st King's Own Light Infantry under Lieutenant-Colonel St Maur and the Sappers under Major Fraser, advanced on the stockade under a heavy fire and carried it at the point of the bayonet.

It was now 11. The troops had been under arms since 4 A.M., and the heat was terrific. Many officers were disabled by the heat, and some died of sunstroke.

The General, therefore, halted here, holding his position, though much annoyed by the enemy, till next morning. He was then informed that the battery of heavy guns could not be landed till mid-day, and that the Commissariat were unable to

issue rations in time for an advance before the heat of the day. Through the Commissariat failing, the General had to wait till the morning of the 14th.

The Burmans had made every preparation to receive the attack on the south face, to which a direct road led from the river, and had mounted a hundred pieces of cannon on the defences. General Godwin, however, in order to turn the position, moved towards the east with four guns protected by two companies of the 80th, followed by the rest of the wing of that corps with two more guns and the 18th Royal Irish and the 40th Bengal Native Infantry. The 51st King's Own Light Infantry and 35th Madras Native Infantry were in reserve, and the 9th Madras Native Infantry kept open the communication with the shipping. The heavy guns were got into position under a heavy fire from the enemy's guns and skirmishers.

By 11 A.M. the fire of the heavy battery had cleared the eastern entrance

to the pagoda, and a storming party was formed of a wing of the 80th under Major Lockhart, two companies of the Royal Irish, and two companies of the 40th Bengal Native Infantry, the whole being commanded by Colonel Coote of the Royal Irish. Captain Latter, leading the troops, crossed an open space of some 800 yards under a heavy fire, from which they suffered severely, and on arriving at the foot of the steps leading up to the pagoda made a rush, and the great Shway-dagon pagoda fell a second time into our hands. The enemy fled in confusion. The loss during the three days' fighting was heavy, amounting to—

Officers	Killed	Wounded	Total
Non-commissioned rank and file	3	15	18
	19	114	127

The loss on board the men-of-war was two men killed and one officer and 23 men wounded.

The whole Burmese army retired northwards, and the people, relieved from oppression, returned to their houses, whilst the inhabitants of the surrounding villages brought in vegetables and various other articles for sale, and many offered themselves for employment as coolies.

Forewarned by the occurrences of the previous war, and the sickness that had during the former occupation of Rangoon wasted the force under Sir A. Campbell, Lord Dalhousie had taken every precaution to prevent any outbreak of disease.

The proximity of Moulmein, now a large and flourishing town, enabled the Governor General to take early and effective arrangements made for the supply of troops means for the health and comfort of the troops.

The resident merchants and shopkeepers at once procured every kind of supply likely to be needed, whilst before the arrival of the expedition the civil officers had collected two thousand head of slaughter cattle, and so continued and steady were their exertions, that in August the number in stock had increased to three thousand head.

Lord Dalhousie had also directed his attention to the housing of the troops, and for this purpose had caused to be constructed sixty wooden barracks in frames with thatching, each capable of containing a company. These were prepared in Moulmein and sent over to Rangoon, and, together with the numerous monasteries and rest-houses in the town and near the Great Pagoda afforded full and sufficient shelter for the force.

Advantage was taken of the salubrious climate of Amherst to establish there hospitals for the sick and wounded, who Hospital establishment at Amherst were removed from Rangoon.

The result of these precautions was that, although the troops suffered much from the first three days' exposure, the effects of the climate were but temporary, and the general health continued steadily to improve.

After the capture of Moulmein the Burmese troops did not retire far, and on the 11th and 14th April they attacked the pickets of the 26th Madras Native Infantry, but were driven off with very slight loss to the British.

With a view to seize the whole coast line and prevent any attack on the southern portion of Arakan, General Godwin determined to seize Bassin. On the 17th May he accordingly left with 400 men 51st King's Own Light Infantry, 300 men 19th Madras Native Infantry, and details of sapper and artillery in the *Severis*, *Muzaffar*, and *Tenasserim*, accompanied by the *Plato*. Commodore Lambert accompanied the General.

On the 18th April the flotilla arrived off the Burmese position, a strong well-built, well-armed mud fort. General Godwin thus writes —

"The enemy looked at us, but did not show any disposition to attack.

Capture of Bassin, 18th May 1852 The flotilla moved at the left of their position, a strong well built mud fort, armed with cannon and men. Thus we passed within 200 yards, and

so in succession all their defences for nearly a mile. Immediately the steamers took up their position, the troops were ordered to land, and nearly all the men of the 51st Foot landed before a shot was fired. The enemy were so completely surprised and paralysed by our approach. A pagoda in the centre of the line was stormed by a party of the 51st Foot under Major Erington, and immediately after moving to their right they came upon the mud fort, which was obstinately defended, but was carried at the point of the bayonet, and in forty minutes the whole position was in possession of our troops. Whilst the works on the left bank were being attacked, Commodore Lambert landed on the right and captured and destroyed a stockade mounting six guns.

" Our loss was—

Officers	Killed	Wounded.
Rank and file	0	5
	2	18

" On board the ships—

	Killed	Wounded
Warrant officer	1	0
Officers	0	2
Men	0	7

" Leaving a garrison of—

2 companies 51st King's Own Light Infantry,
303 men 9th Madras Native Infantry,
2 12 pounder howitzers,

under Major Roberts, General Godwin returned to Rangoon. The whole Burmese force at once retired on the Irrawaddy, and in a few days 26 headmen of villages came in to offer their services."

On the 19th May Martaban was attacked by a strong force of Burmans,

Burmese attack on Martaban,
May 1852

in number from 10,000 to 12,000 men. The attack was not serious and was easily beaten off. The guns of the place and the *Feroze* poured a heavy fire into their retreating ranks, and completely broke their formation. They were pursued by the infantry by land and by three cutters up the Salween. Numbers fell between the fire of these two parties, and by evening the neighbourhood of Martaban was cleared of the Burmans.

Although the rains had already set in, General Godwin despatched a

Expedition against Ioga, force against Pegu, where a large body of the enemy were reported to be. The force consisted of—

100 men 80th Foot,
100 men 67th Bengal Native Infantry,
30 men Madras Sappers,

under command of Major Cotton, and left Rangoon on the 3rd June 1852 in the *Phlegelton*, with the boats of the *For*, under Commander Tarleton. By nightfall the steamer had reached within 16 miles of Pegu, where she anchored. Next morning the whole party took to the boats and proceeded to Pegu. After some sharp fighting on the right bank of the Pegu river, the enemy was driven across it, and the troops proceeded to the attack of the pagoda, which was stormed after some heavy skirmishing. Next day the fortifications were destroyed, and the force returned to Rangoon.

In the early part of July Commander Tarleton left Rangoon with the Hon'ble East India Company's steamer *Madura*, and being joined on the way by the Bengal Marine steamers *Mahanuddee*, *Proserpine*, and *Phlegelton*, steamed up the Irrawaddy. At Kanoung they found a force of 1,500 men, who opened fire on them, but the small squadron after shelling them for an hour continued its course, and at sunset of the 7th anchored off Myanoung. Next morning they came across the main Burmese army, numbering 7,000 men. Proceeding upwards, Commander Tarleton arrived at Prome on the 9th, which he found undefended. He took and sank in the river nineteen iron guns, 32, 24 and 18 pounders. Returning to Rangoon, he found the Burmese force at Akuk-toung crossing the river. He captured ten men and five brass guns, and destroyed a number of war-boats, with a large quantity of arms and ammunition. A few days afterwards the commander of the *Pluto* landed at Akouk-toung and took possession of 28 guns from 4 to 18 pounders. The results of Commander Tarleton's operations in July were the capture of 56 guns, 10 war-boats, and several boats containing

stores and ammunition The whole delta of the Irrawaddy was cleared of the enemy, whose force, reduced from 7,000 to 2,000 men, was assembled near Prome without artillery or defences of any kind

Towards the end of July the Governor General of India arrived in Rangoon He thus describes the British situation
Governor General visits Rangoon, July 1852 "We are masters of the seacoast from east to west

We control by our steamers the whole of the streams of the Irrawaddy from Prome to the sea With the exception of a few thousand men near Prome, and a still smaller body towards Martaban, no Burmese troops whatever can be heard in the lower province In the upper province no army has been collected, no defences have been constructed at Prome, and no force remains there

"The Burmans have betrayed a total want of enterprise, courage, power, and resource Large bodies of them retire at the mere sight of a steamer, or in the presence of a few Europeans so soon as they are landed At the same time no sign has been shown of an intention to submit"

The result of the Governor General's visit and consultations was that on the 13th August General Godwin was directed to advance on Prome in September after he had been reinforced by two brigades, one from Bengal and one from Madras, and to confine his operations to the province of Pegu A strong flotilla of Burmese boats was got ready, and on the 27th September the advance began The 1st Division under General Godwin, composed of—

1 company Madras Artillery, with two 24 pr howitzers and four 9 pr guns, 18th Royal Irish,	80th Regiment, 35th Regiment Madras Native Infantry, 119 men Madras Sappers,
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left in the East India Company's steamers, accompanied by the Commodore, and arrived off Prome on the 9th October The Burmans at once opened fire on the shipping At 4 p.m. the troops were landed a little to the north of the town, and after some slight fighting they obtained complete possession of it The total loss was one man killed and twelve wounded The next morning the troops advanced to storm the Great Pagoda and the heights to the eastward, but found that this had been abandoned during the night The Burmese commander had made the same mistake as the governor of Rangoon He had expected the troops to land opposite the pagoda and to advance along the western approach, and had placed batteries so as to enfilade the whole road, and he was entirely taken by surprise when he found that the attack would be made from the north

The Burmese leader had been reinforced, and had now some 18,000 men entrenched in two stockades at Yathay These were left unmolested until the rest of the British force could be brought up to Prome, but on the 15th October, three days after the capture of Prome, the Burmese general surrendered, and his troops dispersed

After the first capture of Pegu in June it was abandoned to the Talung, who promised to hold it against the Burmans—a promise they kept for just one week, when it was reoccupied by the enemy, and the defences strengthened After the capture of Prome, and before the main body of the army was moved forward from Rangoon, General Godwin despatched a column to take the town,—

300 men 1st Bengal Fusiliers, 300 men 1st Madras Fusiliers,	400 men Madras Native Infantry, 70 men Madras Sappers,	5th
--	---	-----

with two 24-pounder howitzers, under the command of Brigadier MacNeill,

which embarked from Rangoon on the 18th November in the Bengal Marine steamers *Mahanudda*, *Nerbudda*, *Damoodah*, and *Lord William Bentinck*, and, accompanied by General Godwin and his staff, anchored two miles below Pegu on the evening of the 20th. The Burmese position was found to be strongly fortified. The next morning the troops landed and advanced on the extreme left of the enemy's position, where they had a strong post. The following is an account of the capture and occupation of Pegu. "My detachment (5th Madras Native Infantry), all ranks included, was 400 strong. 280 were with me in the foremost steamer, the *Bentinck*, the remainder with General Godwin in the *Mahanudda*. At noon on the 19th we first sighted armed Burmans. That night we were aground seven miles below Pegu.

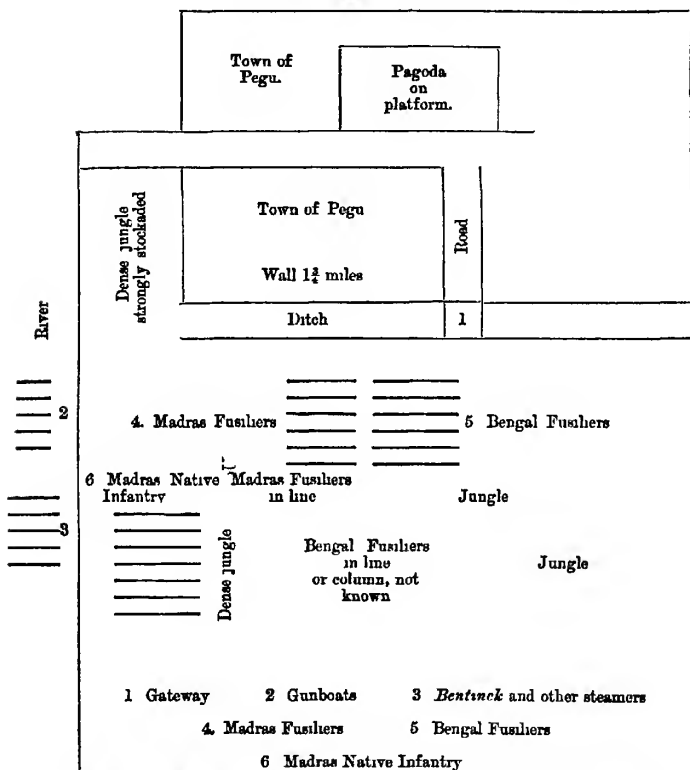
"On the 20th at daybreak we advanced a mile or so. Companies were sent on either bank to clear the jungle. In the course of the day we exchanged many shots with the Burmans, who came boldly down and delivered their fire on the steamer. At 5 A.M. the remaining steamers came in sight. We proceeded 2 or 3 miles and dropped anchor. I was directed to place a strong picquet on the western bank. About 7 P.M. General Godwin arrived and directed me to have my detachment drawn up at 6 A.M. next morning.

"At 4 A.M., November 21st, the 5th Madras Native Infantry got under arms, and about a quarter to 5 the landing began. We were soon formed up as ordered, occupying a grove of plantains. The Rifles and Grenadier companies shortly joined me, and by 6 A.M. General Godwin in person came and gave me his orders. They were in the advance on Pegu, or any other movement which might take place, to keep up with the Madras Fusiliers and not lose sight of them.

"The following rough sketch of Pegu shows the position of the troops —

TOWN AND PAGODA OF PEGU

Wall



"At a quarter past 6 A M the firing from the jungle began close about the troops. Four or five casualties immediately occurred. General Godwin, who was ever in front, was reconnoitring. The advance was first contemplated through the jungle between the river and the wall, and the Bengal and Madras Fusiliers were pushing in that direction, but the severity of the fire proved the Burmans were there in a strong position, and a flank movement, parallel with the south wall and distant about 150 yards from it, was begun and continued for nearly 2 miles through breast-high grass and dense jungle. Before the movement a working party, covered by the rifles of the 5th, was sent forward to clear a track, the whole force following as they best could, scattered here and there in single and double files over the whole way, a heavy fire pouring

upon them for four hours and a half. The guns and sappers had been hurried meanwhile to the front. Advantage was taken, wherever it could be had, of a good bank to pour in volley after volley, but of course the whole force was greatly scattered. The sun was fearful, and the fatigue very great. By the time General Godwin had arrived with the troops from the rear, it was discovered that most were deadbeat, and that some time must elapse before proper columns could be formed. The best part of the Bengal and about half the Madras Fusiliers were at last got together, allowed breathing time, and, the rifles forming a line of skirmishers in front, let loose on the gate and crumbling wall, the ditch here having little water in it.

"The fire while the columns were being formed was very severe. Passing the gateway the storming parties drove the Burmans, now flying to the westward, past before them, and then retracing their steps made as rapidly as they could for the pagoda, about a short mile distant. Here some volleys were exchanged, and Pegu was in our possession."

On the 21st the General with the greater part of the troops had returned to Rangoon, leaving a force at Pegu, consisting of—

200 men Madras Fusiliers | 200 men 5th Madras Native Infantry
2 24 pounder howitzers

The whole under Major Hill. These occupied the pagoda.

Our loss was 3 officers wounded and 35 or 40 men killed and wounded. Two or three officers were disabled by the sun, amongst them Brigadier MacNeill.

The enemy in Pegu amounted to 5,000 men. On the 23rd a considerable

Burmese investment of Pegu number of Talaing came in, whom Major Hill collected together under the defences of the pagoda.

On the night of the 24th November the enemy made an attack upon our gunboats, but were immediately repulsed. Late in the evening of the 27th they made a most daring attack on all sides of the pagoda, but were vigorously repelled.

At 8 o'clock on the morning of the 6th December the enemy's infantry and cavalry surrounded the pagoda and attacked us in great force. They continued to annoy us with jingals and musketry all that day and during a great part of the night, and succeeded in driving off a large herd of Pegu buffaloes.

From the 7th till the 13th inclusive the enemy were firing jingals and musketry day and night. On the 11th two gunboats arrived from Rangoon with stores and ammunition, but these were driven back after losing several men. The position of Major Hill's small force was now most critical, the besieging army, consisting of 11,000 men, disposed as follows—2,000 at Shway-gyeen, 97 miles north of Pegu, 1,000 men at Sittang, 32 miles east of Pegu, and 8,000 at Pegu.

In addition to the small body left to garrison the place, two gunboats were also left at Pegu, under the command of Lieutenant Mason. Each boat carried a 12-pounder howitzer and 12-pounder rockets. The boats were completely hidden from the pagoda by thick belts of bamboo jungle, which grew up to within a hundred yards of the great temple.

Some idea of what the troops had to defend may be gained from the following particulars. The pagoda stands on three

The Pegu Pagoda. terraces. The upper one contained the troops of the garrison and the commissariat stores, it was nearly a square, each side of which measured from 210 to 220 yards. A low brick wall 3 feet high had formerly enclosed it. The dilapidation of the walls was on every side apparent, and on

the north-east and west sides scarcely any wall remained, but high reedy grass had sprung up. A range of low buildings ran along each face in a line with the walls, which our troops occupied. There was a phoongyea house on each side and adjoining the base of the pagoda itself. In these the officers were quartered, one only being reserved for a magazine. There were four large entrances on the top platform, open and about 30 feet wide. Flights of steps joined the entrances from below.

The second terrace was twelve feet below the upper, and extended about 40 feet on all sides from the wall. There was another descent of six feet, when a third terrace also ran about 40 feet. The second and third terraces were respectively 320 and 450 yards in length on each side of the pagoda. The high grass prevented our sentries in many places from seeing each other, and exposed them to sudden surprise, the Burmese being most skilful in creeping noiselessly through grass to cut down sentries. There were a great many small pagodas on the east and west sides, a little way beyond the lower terrace. These were so close together that on the east face, 120 yards off they formed a complete wall 10 yards long, behind which the enemy were in perfect safety.

On the 12th December General Godwin with 1,200 men left for Pegu in two steamers and in boats, whilst a Hind column was dispatched under Colonel Short to clear the line between Ringoon and Pegu, where parties of Burmese were harassing the villagers. The water column arrived on the 14th, and the Burmese, hiding themselves between two fires, retired before they were attacked.

The next morning the whole Burmese army, of 9,000 or 10,000 men, were observed from the pagoda taking up a position and entrenching themselves on the plains about the village of Kully, about 5 miles on the Shwabyeen road.

On the 16th orders were issued for the following force to be in readiness to march the following morning —

570 men 1st Bengal Fusiliers		380 men Sikhs
152 men 10th Bengal Native Infantry		100 men Madras Fusiliers
30 men Sappers		
Total 1,230 men		

These were ordered to take one day's ration with them, which were carried in carts drawn by buffaloes.

Our force marched out of the pagoda and emerged on the plain about half-past 9 a.m. On reconnoitring their position it appeared to be three lines of entrenchments,—the right on the river, and extending across the Shwabyeen road far into the plain, on the left of the road, which was the centre of their position, ran a singly nali, which was subsequently found to be so spiked and entrenched, that had the advance been by that route, our loss would have been very considerable. General Godwin determined to turn the left of their position, and moved in that direction. The Cassy horse approached and kept pace with one column, moving on our right flank. After the force had turned the left of the first line of entrenchments, it was halted and dispositions made for attacking in two columns—one, the left, under General Steel, the other under General Godwin.

The left column was soon in its place, impatiently waiting the signal to advance. It was not given. The enemy were seen moving in huge masses from their left, and had the column been permitted, it could have cut them off. When the advance by General Godwin took place, the enemy was in full retreat, and although the attacking party was exceedingly energetic, our men were never able to approach sufficiently near to do the execution they would

have done if permitted to charge at the proper time. While our column was halted, the Cassay horse on the right made a charge, but on being fired at they got out of the way at the quickest possible pace.

The Burmans retreated by the Shway-gyen road, and the column was halted in a tope of trees for more than an hour. They then followed a road leading nearly west, and although there was no trace of the enemy, continued to follow it till sunset, when they reached the village of Lephadon. Here the force passed the night, and next morning marched in a north-easterly direction. After proceeding some distance they came on the Shway-gyen road, about two miles north of the tope, where they halted the day before, and which showed every trace of a multitude having crowded over it in confusion.

The force, passing through the village of Moutsanganoo, reached a vast plain extending to the front and right. The guides declared the enemy were 20 miles off, and in this belief all ranks got under such cover as the place afforded, and it was determined to return on the following day to Pegu. About 1 a.m. two Cassay horse appeared, and on reconnoitering the road in front, it appeared that the whole Burmese army had been lying concealed in some villages. The troops were now turned out, and two columns of attack formed. The right moved off, while the left was detained by General Godwin's personal order. Thus was lost a chance of fully and successfully closing with the enemy, who, as on the previous day, retreated slowly and surely.

There can be little doubt that a steady, active advance would have brought our troops into action, but apparently General Godwin was not desirous of risking such a contact. The skirmishers of the left column only were engaged, the right entered the village on the enemy's left. Night closed in, and the force marched back to its former ground. The following morning they left Moutsanganoo after sunrise, and reached Pegu about 1 o'clock p.m.

Remarks on operations

In the operations of the 17th and 18th General Godwin appears not to have acted with his usual foresight and decision. Had he waited for Colonel Stuart's column with the cavalry, the enemy would in all probability have been entirely destroyed, as the country was most favourable for cavalry. Laming, in criticising these operations, says* "Between Kully and Moutsanganoo there was a sufficient space of open ground for the destruction of the force. A blow might have been struck at Kully on the 18th or 19th which would have paralysed them with terror, and compelled them to submit to our power, and from the carriage the enemy's camp would have supplied a rapid movement on Shway-gyen would have obtained us possession of that town, and the almost certain annihilation of that host of army * * * We must relate, however, that this grand opportunity was lost by not waiting for a most efficient column, which marched from and back to Rangoon without once coming into action."

The exposure and fatigue the troops underwent on the 17th and 18th caused much sickness from cholera. The Bengal Fusiliers in a few days lost upwards of twenty men. The natives also suffered considerably.

The General left Pegu on the 20th, and arrived at Rangoon on the morning of the 22nd, after leaving a reinforcement with the garrison at Pegu,† and strengthening their party of sappers to allow of their putting the place in a perfect state of defence.

* *Our Burmese War*, page 248.

† Amounting now to 700 men, including 150 Europeans.

The account of the investment and relief of Pegu may be appropriately concluded with a copy of the General Order issued by General Godwin in honour of Major Hill's gallant defence "Major-General Godwin is most proud to express his admiration of the noble defence of the Pegu pagoda (against a host of enemies) made by Major Hill and the brave handful of officers and soldiers under his command for so many days and anxious nights, cut off as they were from the succour of their comrades by the works of the enemy on the river, as well as by the distant communication with the head-quarters of the army. It is a fine example to this army of what bravery, under the direction of cool courage, can do, giving, as Major Hill has done, confidence to all, by which alone the Pegu garrison has gained so much honour."

On receiving the despatches informing him of the occupation of Prome and Pegu, the Governor General in Council felt that, as it had been determined not to advance far beyond Prome, the time had come to declare the annexation of Pegu, and on the 31d December he wrote to Captain (now General Sir Arthur) Phayre appointing him to the civil charge of Pegu, and, in conjunction with General Godwin and Commodore Lambert, Commissioner for the purpose of negotiating a treaty with the king of Burma. At the same time he forwarded a letter for the king, and a proclamation to be issued whenever Captain Phayre considered best. The proclamation was short. After very briefly recapitulating what had occurred, it declared the province of Pegu to be a part of the British territories in the East, adding that such Burman troops as still remained in the province should be driven out.

The proposed treaty was still shorter. It consisted only of four articles: the first declaring that there should be perpetual peace between the two States, the second that Pegu was ceded to the British, the third that trade should be free and unrestricted, and the fourth fixing the period within which it was to be ratified.

The letter was longer and warned the king that the British Government might, with all justice, continue hostilities to the entire extinction of his majesty's kingdom, and that, if he attempted to interfere with our possession of Pegu, such a result would inevitably follow.

The proclamation was issued on the 20th December 1852, and as soon as possible forwarded to Ava.

On the 8th December the enemy made a most daring night attack

Burmese night attack on Prome. About midnight the camp was startled by the sharp and heavy report of three signal guns from the enemy's advanced post, and shortly after the sharp rattle of musketry and the heavier report of the jungle announced that our picquets were attacked. This was rapid, but our troops assembled more rapidly, and in a short time each picquet was reinforced, and every available point occupied.

A detachment of the 35th Madras Native Infantry held Narweing, supported by connecting picquets of Her Majesty's 18th and 51st, thus communicating with the town. The head-quarters of the 35th supported the main body of the 51st on the left. The Madras Sappers with double picquets supported the 40th Bengal Native Infantry, and the 18th Royal Irish on the heights on our extreme right. The guns, with portions of our 18th and 80th, held the central position.

The enemy made repeated assaults. Charge after charge, accompanied with wild yells and cries, was attempted, but the steady fire from the heights and from our left drove them back again and again. A few of them reached the river's bank, where some friendly inhabitants of the town had built their

huts. Here they wounded a few poor men and women, but a demonstration from our right made them retreat speedily, and the irregular horse held that point in check for the rest of the night. The attacks lasted till daylight, but did little harm, as the enemy always fired too high. Their chiefs were distinguished by their gilt helmets, riding in advance and arranging their posts.

On the 29th December a field force was ordered to proceed to Martaban on the shortest notice. The column was to be under the personal command of the Brigadier-General Commanding the Madras Division of the Army of Ava. The general staff of that division were to accompany the force. The following details were ordered to be furnished from Rangoon —

1 company Madras artillery and battery	150 Madras Fusiliers
1 company Sappers and Miners	5 companies 10th Bengal Native Infantry
450 men Bengal Fusiliers	5 companies 5th Madras Native Infantry

A detachment of Ranggarh Irregular Cavalry

On the 4th of January 1853 General Steel and staff embarked on board the Hon'ble East India Company's steam frigate *Mozuffer* for Martaban, and the *Zenobia* and *Berenice*, with the transports *Flutell*, *Risack*, *Alalanta*, and *Trazer*, were likewise employed to convey the column. Her Majesty's ship *Sphinx* towed the *General Godwin*, laden with ordnance and stores.

On Wednesday the 5th all the troops were anchored off their destination.

On the morning of the 14th January the column marched out of Martaban by the Behng gate. The force had received detachments from Moulmein, and now consisted of 2,100 men, with numerous followers.

On arriving at Kyouk-ye-dwing, nearly four miles from Martaban, it was found that a party of the enemy had stockaded themselves on the top of a hill, and also in a village at the foot of another. From their commanding position they opened fire on our advanced guard the instant it entered the plain, and from the jungle kept up a heavy cannonade, followed by rapid volleys of musketry. Two howitzers were now brought to bear on them and against the breastwork, and covered the storming party while it advanced. On reaching the principal work it was found empty. This was owing to the destructive and admirably directed fire of the artillery, and there might have been considerable loss had not the General first thoroughly used this arm.

On the 18th the force left Kyouk-ye-dwing for Gongoh, 7 or 8 miles distant. After proceeding 2 miles, the advanced guard was fired on from a small outpost. They then fled to a larger work beyond this, which commanded our approach. There they again fired on our advance, and then evacuated the position.

The position at Gongoh was discovered to consist of a deep and well dug breastwork carried round the front and flanks. Abatis helped to protect the post, the rear of which led into dense forest jungle. Bamboo spikes concealed in small pits were likewise numerous in its vicinity.

The enemy now commenced firing round shot at the advance, but without doing damage. Presently two howitzers and a rocket tube were brought into action. After 20 or 30 rounds the Burmans were plainly seen decamping with the greatest possible speed, and the storming party found the position vacated. The loss of the enemy was found to be from 80 to 100.

On the 21st the column reached Ouehtala, and on the 25th Thatong. The garrison of this place, 2,000 in number, had escaped before our arrival.

The light division of the Martaban column started from Shway-gyeen March of light division from for Toungoo on the 15th February 1853 It consisted of the following troops —

European Madras Artillery	60	
Bengal Fusiliers	200	
Madras Fusiliers	170	
	<hr/>	
Total Europeans	430	
	50	
Madras Sappers	}	Detachments
Ramgarh Cavalry		
5th Madras Native Infantry		
10th Bengal Native Infantry		
2 24-pounder howitzers		
2 6½" mortars and rocket tube		
	Natives	500
	<hr/>	
Total of all arms		980

Ten days' provisions were taken in boats up the Sittang, escorted by the boats of the *Ferox*, under Lieutenant Hellard, and ten days' provisions were carried by 60 elephants and 40 platform carts, to each of which an extra train was furnished.

The force arrived at Toungoo without meeting with any opposition from the enemy on the 22nd February. The Burmans had evidently not expected our troops, as no attempt had been made to remove anything, and the guns had not been even mounted on the walls, but were collected in order and placed beneath a large shed.

General Steel resolved to await here an answer to his communication with General Godwin. Meanwhile the provision boats had arrived, and there was every probability of the column being well supplied in the Commissariat Department.

While affairs went smoothly in this part of Burma, a grave disaster had occurred in another part, which must now be narrated.

This was the expedition against a notorious robber chieftain named

Disaster near Donabew, Feb
ruary 1853

Nya-myat-toon, who had won for himself an all-powerful name in Donabew and its vicinity. He had captured our boats in their progress up and down the river, and had proved himself to be a dacoit so bold and resolute, that it was deemed necessary for the safety of our transports to send a considerable force against him. This consisted of—

Seamen	Men
Marines	185
Officers under Captain Loch, H. M. S. <i>Winchester</i>	62
Men, Bombay Native Infantry, under Major Murchin	25
	300
Total	<hr/>
	572

Two 3-pounder guns also accompanied the expedition.

The party, which left Rangoon in the beginning of February, advanced from Donabew, and, after proceeding a long distance without observing any signs of an enemy, came upon the bank of a small nala. This was steep on both sides and partly filled with water. The road which the force followed through the jungle was at this spot so narrow that the front could only be formed of two or three files. The thick brushwood and terrible bamboo spikes in the ground made it impossible to deploy a line of skirmishers on either flank. As soon as the leading files of the column appeared on the banks of the nala, a perfect hail of musket balls was poured on them from

a masked stockade on the opposite bank, and also from marksmen concealed in the branches of every tree in the vicinity "All our men in front," writes a narrator of the scene, "were immediately struck down * * * Captain Looh was struck by a bullet, which shattered his watch and passed through his body Captain Price of the 67th fell mortally wounded Lieutenant Kennedy of Her Majesty's ship *Fox* was killed, and men continued to drop on all sides" * A retreat was now resolved on, and this was conducted in an able, cool, and gallant manner Our loss in this affair was 11 killed and 71 wounded

The guns were spiked and abandoned, and the force retreated for 52 miles, harassed by the enemy and exhausted from want of water

The cause of this disaster is manifest The force marched 25 miles through dense jungle towards the stronghold of a determined robber, absolutely neglecting the most ordinary military precautions

There seems to have been no advance guard, nor was there any attempt to reconnoitre the country in front The path is observed to be narrow, with dense jungle and spikes on either side This should have been sufficient indication of the presence of an enemy, and there was no excuse whatever for falling into so palpable a trap The force would then appear to have emerged from the path and drawn up on the bank of the nala, where they were fired on A panic then seems to have seized them, for no attempt was made to get the men under shelter and fight, and the loss sustained was not severe enough to justify a retreat, when there were still nearly 500 fighting men unhurt After this disaster General Godwin issued an order that in all combined military and naval expeditions the senior military officer shall have the chief command, no matter what his rank may be relatively to that of the senior naval officer present

On the 5th January General Godwin reached Prome The Burmans had evacuated the place, and also the large stockade of Yathay This was four miles from Prome, and covered an immense space of ground, and would have required a large force to hold it The position was good, and in one or two places it was very strong

On the 23rd January General Godwin proceeded to Meaday, found it evacuated, and took possession Leaving a garrison of 500 men here, the General returned to Prome

On the 16th January an attack was made on Pantauuo, and the place was carried with little loss On the morning of the 17th the advance was made up the creek, into which Captain Hewett had thought it rashness to venture Two boats could not pull abreast in it The banks were low and covered with jungle, with stakes driven into the river and trees across to bar the passage The boats had only proceeded a few miles when from each bank came a volley of musketry, and the fire increasing, the boats were driven back with the loss of twelve killed and wounded This event occurred previous to the disaster near Donabew Now come more decisive and satisfactory operations to relate

On the 18th of February Sir John Cheape left Prome to proceed against the robber chief Myat-toon He took with him the following detachments, composed of the most healthy men of the different regiments,—

Her Majesty's 18th Royal Irish	200
" 51st King's Own Light Infantry	200
Rifle company, 67th Bengal Native Infantry	
Sikhs	200
Sappers	70

two guns, a 24-pounder howitzer, and a 9-pounder of the light field battery, and some rocket tubes served by some dismounted men of the Madras Horse Artillery.

The General landed and collected his force at Henzada, 35 miles north of Donabew, determining to start against Myat-toon's stronghold from this quarter.

The force started on the 27th, taking seven or eight days' provisions with them. On the 26th the General found himself, as he believed, still a considerable distance from the chief's stronghold. Provisions falling short, he determined to make for the river, where the force arrived on the 28th.

On the 1st of March the force was joined by a detachment of the Ramgarh cavalry (irregular), and the whole body reached Donabew on the 3rd March.

Here Sir John Cheape resolved to wait for the reinforcements which were expected from Rangoon. The Europeans lived on the flats and streamers, and the native troops inside the pagoda.

On the 6th 130 of Her Majesty's 80th Foot, 300 of Her Majesty's 67th Bengal Native Infantry, 2 mortars, and a large supply of commissariat supplies arrived.

Everything being now ready, including two rafts prepared by the sappers, the force started at 2 P.M. on the 7th instant, taking six or seven days' provisions, it having been ascertained that three days would bring them before Myat-toon's position.

The right wing under Major Wigston, consisting of the detachments of Her Majesty's 18th and 80th Foot, with the 4th Sikhs, went in front. Then came the guns, followed by the irregular cavalry, rocket tubes, and mortars. The left wing, consisting of detachments of Her Majesty's 51st Foot and 67th Bengal Native Infantry, under command of Colonel Sturt. The direction taken by this force was almost due west. After proceeding three miles the advanced guard surprised a small picket, and shot two of the enemy. About 5 P.M. the column reached Akyo and the bank of a broad nala. Here the enemy opened a fire of musketry and jingals, but our guns came to the front and silenced them for a time. The troops passed the night behind a belt of jungle parallel to the nala. Although the Burmans dropped in shots all night, only two men were slightly wounded.

On the 8th, the rafts having been put together by the sappers, a party of the 51st and Rifles were thrown across the nala. A little firing took place, but no casualties. All this day was occupied in crossing the guns and baggage. In this part of the country the fogs were particularly heavy at this season of the year, therefore the force generally breakfasted before starting.

On the 11th the force came into collision with the enemy, and the road entered a thick forest. The road was frequently obstructed by trees being cut down here and there and thrown across the road, and which necessitated a new road being made. The men passed the night here, no fire was lighted, and the night passed quietly away. Cholera made its first appearance in camp this night, and a wounded Sikh died. Myat-toon's place was said to be only two miles from hence to the left, but there was no road. It was now felt that the guides had played false. So next morning, without rations having been served out, the force retraced its steps. The spot where the road branched off to Myat-toon's stockade was reached, but, as provisions were again failing, it was not considered prudent to advance on it, and the General decided to return to Kyomtano and wait for a supply. Several cases of cholera occurred on the road. On the 13th Colonel Sturt with all the hackeries and some three hundred men went into Donabew for provisions. The sick and wounded were sent in along with him. Meanwhile the troops were put on half rations.

On this day, 18th March, no less than thirteen deaths from cholera occurred. The force remained here until the 18th, when Colonel Sturt returned with ten or twelve days' provisions. The Burmans had fired a few shots into camp every night, but fortunately without hitting any one.

On the 17th the right wing under Major Wigston, R.A., was sent on the Operations from the 17th old road, and again captured the breastworks, March which had been much strengthened, with the loss of one officer and five men wounded.

On the 18th the rest of the force started, leaving the sick and surplus provisions with a detachment under Lieutenant Dickson of the 51st in a small stockade at Kyomtano. The column continued their march, the left wing under Colonel Sturt in front, until they came to another breastwork at about 4 P.M. This work was carried by Her Majesty's 51st King's Own Light Infantry and the 67th Bengal Native Infantry, our loss being one officer and one sepoy killed, and one officer and six sepoys wounded. At 5 P.M. the force encamped by a piece of water about a mile further on, cholera raging in the camp. At 7 A.M. on the 19th the column advanced, the right wing in front. Having gone a mile out, the enemy were found in a breastwork on the opposite side of the nala, or at the head of the piece of water on the right, along the edge of which the road lay. Under the circumstances Sir John deemed it the safest plan to get at the enemy as speedily as possible.

Supported by the guns and rockets, the General now resolved to carry the breastwork on the right. Her Majesty's 80th Action of the 19th (see plan) formed the advanced guard, followed by the sappers clearing the road.

On coming opposite the enemy's left flank the firing commenced. The rockets were advanced and opened fire. The Sikhs were sent on to support the 80th, and the 18th Royal Irish in support of them.

The sappers worked admirably, and the guns were shortly got into position and opened a well directed fire, which gradually became very heavy on both sides. Major Wigston, Major Armstrong of the Sikhs, and many other officers and men were wounded. The fire of the enemy on the path leading up to the breastwork was so heavy that the advanced party had not succeeded in carrying it. Her Majesty's 80th and the Sikhs tried to get round the extreme right of the enemy, but thick jungle and strong abatis prevented the men from making their way through. The 18th Royal Irish now came up. The fire of musketry and grape was so heavy that they got scattered and sustained great loss. In the meantime Major Reid, of the Bengal Artillery, gallantly brought up a 24-pounder howitzer, and opened an effectual fire on the enemy at a range of only 25 yards. The right wing being much weakened by the loss they had sustained, the General ordered a reinforcement from the left. These were led by Ensign Wolseley, Her Majesty's 80th Foot. "The whole advanced in a manner that nothing could check. The fire was severe. Lieutenant Taylor fell mortally wounded, and Ensign Wolseley was also struck down, but the breastwork was carried, and the enemy fled in confusion. Our loss was severe (11 killed and 84 wounded, amongst the latter 9 officers) in this well fought action of the 19th March, which lasted for two hours. The enemy sustained a heavy loss in killed and wounded, but the chief, with a few followers, escaped." "His whole force and means," writes Sir John, "were concentrated on this position, and I imagine he must have had about 4,000 men in these breastworks, which extended 1,200 yards in length."

The troops now returned to Prome, leaving a detachment at Donabew in the pagoda

In these operations against Myat-toon upwards of 140 of our troops were killed and wounded (including three officers killed and severely wounded), and upwards of 100 died of cholera, making the total of casualties up to nearly 250

With these operations ended the second Burmese war. The king of Pegu annexed, 30th June 1853 Burma refused to sign a treaty ceding any territory, but the Governor General, who set little value on a treaty with the Burmans, on the 30th June 1853 proclaimed the annexation of Pegu. The king of Ava made all the concessions demanded by the British, and pledged himself not to offer any molestation to the British troops, or attack any part of his former dominions now annexed to our Indian empire. He also set at liberty all British subjects imprisoned in Ava, and opened the Irrawaddy for trade. At the termination of hostilities our troops were quartered in the following stations and outposts —

Rangoon	Shwagyeen	Shway doung
Yandoo	Toungoo	Padoung myo
Basson	Moulmein	Tomboo
Pegu	Prome	Henzada.
Sittang	Meday	Donabyoo
<i>Grand total actually present</i>		
Officers	{ Europeans 346 } { Natives 177 }	523
Non-commissioned officers and men	{ Europeans 4354 } { Natives 8,242 }	13,576
Grand total		<u>14,099</u>

In studying the history of the second Burmese war, there are several points which appear worthy of especial notice

- 1st — It will be observed that the Governor General, in anticipation of the British demands being refused, had made every preparation beforehand, and a portion of the force was actually in Burmese waters the day after the time fixed in the ultimatum had expired. He was thus able to commence hostilities four days after war was declared.
 - 2nd — Wooden barracks were constructed at Moulmein in frames and sent to Rangoon, where they were put together immediately.
 - 3rd — Supplies and slaughter cattle were collected in Tenasserim, and the troops were well supplied with fresh and wholesome food.
 - 4th — The health of the troops is shown to depend not so much on climatic influences as on the quality of their food and adequate shelter.
 - 5th — It is worthy of notice that the worst outbreak of sickness which occurred in either war was that from which Sir J. Cheape's column suffered in its operations against Myat-toon. These were carried on during the hot weather (March).
 - 6th — An insufficient garrison was left at Pegu, where a larger one could have been left without any inconvenience. Columns of inadequate strength were sent against strong positions, thus courting disaster.
- Expeditions were sent against Myat-toon's stockade, the position and distance of which, as well as the intervening country, were unknown. Insufficient supplies being taken, the force is obliged to return when almost in contact with the enemy.

7th — The want of cavalry was much felt, especially during the operations of General Godwin's force near Pegu

8th — The rise of the Irrawaddy at Prome is from 20 to 25 feet, and both Cox and Crawford mention that vessels of from 300 to 500 tons burden have been built there. In July 1852 the *Pluto* anchored off Prome in 8 fathoms water *. Had General Godwin taken a force in the steamers and gone straight against Ava, the war would have come to an end at once, as every available man would have been recalled for the defence of the capital

The attack of Burmese stock
ades.

The most successful manner of attacking a stockado appears to be as follows —

- 1st — A careful reconnoissance of the place is necessary
- 2nd — If practicable, cut through the jungle and turn the flanks. With his flanks secure and a dense jungle in rear, the Burmese soldier will stand and fight well, but once he thinks the enemy is getting round his flanks, he becomes as timid as a sheep and runs freely
- 3rd — The points of assault having been determined on, should be heavily cannonaded, and the work rendered as untenable as possible. Shrapnel fire and rockets are the most useful for this. When the enemy's fire has been got under, and a sufficient impression made on the work, the sappers, covered by skirmishers, should be sent to the front to clear the abattis and render the ditch passable. The stormers can then go ahead

CHAPTER II

ETHNOLOGY

JUDGING from the great variety of names and dialects, one is tempted at first to believe that remnants of many tribes wandered hitherward, and fixed their habitations in different parts of the country now called Burma. But a closer examination of the manners and customs of the inhabitants and of their various dialects, and of the remnants of traditions still preserved amongst them, shows that they may be divided into four main stocks —

Burmans		Karen
Talaing (Moon or Peguan)		Shan

Round these four nearly all the minor divisions can be grouped. But not all, for some of the wild tribes inhabiting the hill tracts of Arakan and the Selungs, who are found only on the islands of the Mergui Archipelago, differ entirely from these.

The name by which the Burmans call themselves is Myam-ma or Mram-ma, pronounced Byam-ma or Bam-ma. The origin of this name is by no means clear. By the Chinese, and such of the neighbouring tribes as are under Chinese influence, they are called "Mien," and the Tibetans seem to know them under

* Laurie's *Second Burmese War*, page 204.

the same appellation According to Dr Bigandet, it is quite possible that Mien is the true name of the race, and the affix "Ma" has been added for euphony Dr SanGermano, discussing this question, says "If you ask the Burmese what was their origin, they will reply—'Our name alone demonstrates at once the nobility and antiquity of our race and our celestial origin', 'Biamma' signifying 'celestial beings'."*

Sir Arthur Phayre believes they adopted this name since they became Buddhists

It must always be borne in mind that, as regards the Burmese language, the orthography rather than the pronunciation must be taken as a guide, and that phoneticism destroys all the links which bind the words now used to those from which they have been derived

The Burmans are undoubtedly of Tartar origin Father SanGermano* was of this opinion, and, as the late Dr Mason strongly expresses it, "this view is confirmed by the face of the Burman, which has his Tartar genealogy stereotyped upon it in characters that cannot be mistaken"

According to the Burman annals, at some indefinite period before the sixth century, a people came down from the slopes of the Himalayas and settled in the plains between the foot of the mountains and the Ganges Here they were attacked by a people from the west and driven eastwards into the valley of the Irrawaddy There they settled and built the city of Tagoung, the ruins of which still remain on the east bank of the Irrawaddy, about 130 miles above Mandalay Whether this account be true or not, it appears clear that the Burmans are of a kindred race with the Thibetans, and originally came from Thibett of the eastern Himalayas "The vast region of Asia forming the south-eastern corner of that continent, which reaches the sea border from the mouth of the Ganges and Brahmaputra to the Hoang-ho of China, and even further northward towards the mouth of the Amur, is inhabited by races of people who resemble each other so strongly in moral and physical peculiarities, and in the general character of their languages, as to give rise to a suspicion that they all belong to one stock With the rivers which descend from the high country of Central Asia, these nations appear to have come down at various periods from the south-eastern border of the great plateau, in different parts of which tribes are still recognised who resemble them in features and language"† The same author continues to conjecture "that all the people who inhabit the low countries of south-eastern Asia from the Hoang-ho southward, and westward as far as the Brahmaputra, are offshoots from the Bhutia, who inhabit the southern margin of the great central upland"

The Burman, in general, has a fairly well-built frame, with a strong and well-shaped bust, and with legs correctly formed, but a little short Both men and women have long black hair, which the men tie in a knot at the top of the head, and the women behind The men have a singular habit, at one time universal, but now gradually dying out, of deeply tattooing their persons from the waist to the knee in black, so as to give the appearance of a pair of breeches Figures of all sorts of animals and reptiles, &c, are represented, but so closely together, and the intervening spaces so filled up with tracery, that it is almost impossible to distinguish the designs The origin of the custom is very obscure It is not practised by those other Indo-Chinese nations, who

* SanGermano's *Burmese Empire*, page 36

† SanGermano by Tandy, page 86

‡ Pritchard's *History of Man*.

have not come into contact with the Burmans and appears to have been introduced at a comparatively recent date

The character of the Burmans as given by different authors varies much.

Character of the Burmans

The following is Father SanGermano's opinion of the Burman "From the nature of their government, which is above all measure despotic and tyrannical, it will easily be imagined that the Burmans are distinguished for that servility and timidity which are always the characteristics of slaves. Indeed, every Burman considers himself such, not merely before the emperor and the mandarins, but also before any one who is his superior either in age or possessions. But, if they are dastardly and abject towards the emperor and mandarins, they are in the same degree proud and overbearing to those whom they think beneath them either in rank or fortune. There is no contempt, oppression, or injustice they will not exercise towards their fellowmen when they can assure themselves of the protection of government. They are thus vile and abject in adversity, but arrogant and presumptuous in prosperity. Another characteristic of the Burman is incorrigible idleness. Although the fertility and extent of their country seem to invite them with the prospect of great riches, yet they are so indolent that they content themselves with cultivating only what is absolutely necessary for their maintenance and for paying the taxes. Hence, instead of spending their time in improving their possessions, they prefer to give themselves up to indolent repose, to spend the day in talking, smoking, and chewing betel. The same hatred of labour leads to an excessive love of gambling, and also to thieving, to which they are much addicted. It is impossible for this people to tell the truth, nay, a person who ventures to do it is called a fool—a good kind of man, but not fitted for managing his affairs. Dissimulation the Burmans practise to perfection, and while they hate and are endeavouring to ruin a man, will talk to him as though he were their dearest friend."* But the Burmans have also their good qualities, and some estimable people are to be found amongst them. The same author tells us that there are amongst them some persons whose affability, courtesy, benevolence, gratitude, and other virtues contrast strongly with the vices of their countrymen.

In Yule's *Mission to Ava*† a widely different character is given to the Burmans. "Unlike the generality of Asiatics, the Burmans are not a fawning race. They are cheerful and singularly alive to the ridiculous, buoyant, elastic, soon recovering from personal or domestic disaster. With little feeling of patriotism, they are still attached to their houses, greatly so to their families. Free from prejudices of caste or creed, they readily fraternise with strangers, and at all times frankly yield to the superiority of the European. Though ignorant, they are, where no mental exertion is required, inquisitive, and, to a certain extent, eager for information, indifferent to the shedding of blood on the part of their rulers, yet not individually cruel. Temperate, abstemious, and hardy, but idle, with neither fixity of purpose nor perseverance.

"Discipline or any continued employment becomes most irksome to them, yet they are not devoid of a certain degree of enterprise. Great dabblers in small mercantile ventures, they may be called (the women especially) a race of hucksters. Not treacherous or habitually perverters of the truth, yet credulous and given to monstrous exaggerations. When vested with authority, arrogant and boastful. If unchecked, corrupt, oppressive, and arbitrary. Not distinguished for bravery, whilst their chiefs are notorious for cowardice, for with the

* Sir A. Phayre's *History of the Burman Race*
† SanGermano's *Burmese Empire*, page 119

latter cunning in war ranks far before courage. Inexpert in the use and careless in the preservation of their arms, they are indifferent shots, and though living in a country covered with forest, are not bold hunters."

Colonel Horace Browne, describing the Burman of Thayetmyo, sums up his character in these words: "He here, as elsewhere, displays much spasmodic energy and general laziness, much love of feasts and shows, much disregard of the sacredness of human life, and much tenderness for the lives of inferior members of the animal kingdom, much arrogance and inconsiderateness when placed in high position, and last, though not least, much general truthfulness, and, amongst unsophisticated villagers, the very unoriental trait of being quite unable to tell a specious falsehood—a trait which is as honourable to himself as it is convenient to those who have the government of his country. His occupations are cultivation on a small scale and petty trading. Actual poverty is almost unknown, but riches are never accumulated. If any individual does by a stroke of good luck, or a most unusual exercise of thrift, amass a few thousand rupees, he is sure to spend the greater portion of it in the erection of a pagoda or a kyauing, or some similar work of religious merit."*

Regarding the aptitude of the Burman for war, Snodgrass writes as under: "Born a soldier, the Burman is accustomed from his earliest years to consider warlike character and foreign conquest as his trade, and the plunder of the countries he invades as the fair and legitimate reward of his toil. He seldom gives or receives quarter from his enemies, and while on foreign service is ever but too ready to execute the cruel orders of his chiefs, whose policy it is to extirpate all who are likely to be troublesome, and to impress those whom policy leads them to spare with a wholesome and deep-rooted terror for the Burman arms. Guided by leaders whose barbarous ideas of successful warfare consist in laying waste an enemy's country, and whose fame and rewards are measured by the numbers of the enemy that are slain or carried into bondage, it too frequently follows that the soldiers, leaving the best and kindest feelings of their heart in the cottage that contains their family, and forgetting every feeling of humanity as a duty, pursue with reckless indifference every species of cruelty and excess among the unfortunate people who have experienced the awful visitation of a Burmese army."

So wrote Snodgrass at the beginning of the century, but we of the present day, who see the grandchildren of the men he described, cannot endorse his opinion. The Burman of 1882 is not born a soldier, nor has he the memory of any successful wars or conquests to incite his martial ardour. He has been, since he came into contact with the British, beaten on every occasion that he has stood up to fight. His country has been shorn of its fairest provinces, and he is now restricted to the interior of the country, where he can be blockaded at any time that it suits us to do so.

So far from being a brave warrior, he has now the greatest objection to fight, and is beaten even by his neighbours, the Shans.

He loves pleasure and idleness, and hates all manner of restraint, and the trammels of any sort of duty are particularly irksome to him. All he wants is enough to eat, and to be left alone. He will then be perfectly happy and frankly good-natured to all he meets, and will slide through life without a care.

Amongst the Burmans, woman holds a position of perfect freedom and independence. They are open-hearted and merry in disposition, and no European has ever entered

Burmese women

into free and kindly intercourse with them without being more struck with their virtues than their faults

The manners of the Burmans are distinguished by a pleasing mixture of

Pleasing manners

courtesy and freedom They possess great *aplomb*,*

and even the poorest, while frank, are well-bred In their intercourse with each other they are good-humoured and considerate, and the observer cannot but be struck with the enjoyment, contentment, and happiness of the people They are very sensitive to raillery, and have a peculiar dread of what they call a *shet* or shame, and show a great disregard of life by committing suicide for the most trivial causes †

Any momentary annoyance, or shock to their pride, furnishes them with sufficient cause for self-destruction

Nowhere is royalty more venerated than it is amongst the Burmans

Royalty venerated.

Any action taken by commoners against royalty carries with it religious as well as social penalties, yet nowhere is rebellion more common To take life is an abomination, yet fishermen have always been tolerated, and a large revenue derived from leasing ponds and lakes as fisheries ‡

The Burmese is a monosyllabic language § The comparatively few words

Language

which are polysyllabic are derived from Pali, which

has supplied most of the terms that relate to religion and arts, but many of these exist only in a mutilated shape, owing to the tendency of the Burmans to reduce all words to a monosyllabic form Compound words again, formed of the Pali word and its Burmese synonym super-added, are common One of the principal features in the language is the arrangement of the words in a sentence which is, as in Tibetan, the reverse of the order observed in English On the other hand, the Talaing and Shan languages and the Karen dialects require substantially the English arrangement Another peculiarity is in the nouns, adjectives, and tenses of verbs They are all formed by the addition of affixes or suffixes to a verbal root, whilst passive verbs are, in very many cases, changed into active verbs by aspirating the initial consonant The written characters in use are, with one or two exceptions, composed of circles or segments of circles The alphabet is derived from the Pali, and was doubtless imported into Burma simultaneously with Buddhism, but in accommodating an essentially Aryan alphabet to the sounds of a monosyllabic language, considerable changes have been made in the phonetic value of many of the letters

The Burmese language is written from left to right, and with no spaces between the words It consists of ten vowels and thirty-two consonants

The Arakanese are undoubtedly a branch of the Burmese race that separated

Arakanese

off at a very remote period They are separated from the parent stock by mountains which,

except towards the southern extremity of the range, admit of little intercourse from one side to the other Hence those Arakanese living in the northern portion of the country adjoining Bengal have some peculiarities in dialect and in manners || By the natives of India they are called "Mugs," a foreign term never used by themselves By Burmans of Pegu they are usually styled

* Statistical and Historical Account of the District of Thayetmyo, 1874

† Fytche's *Burma Past and Present*, vol II, pages 66-75.

‡ The occupation of fishing being abhorrent to the Buddhist mind, the fishermen, in order to keep up some appearance of attention to their religious duties, always release the largest sized fish as soon as caught

§ That is, every word can be deduced into monosyllabic roots.

|| Sir A Phayre's *History of Burma*

"Ra-khang-tha," or inhabitants of "Ra-khang," the Burmese name of the country of which Arakan is the English corruption. Although influenced in many ways by their northern neighbours of Chittagong, they are yet very clearly differentiated, and much more so than from the Burmans, and the Naaf still marks clearly the boundary between Turanian and Caucasian. In the extreme south of Arakan the people may almost be said to be Burmans, whilst towards the north they differ in character, language, and customs. There they are coarser and more violent tempered, have more of the pride of race, and a concomitant indolence*. The difference in language is only a difference of dialect. Some words are different, but the grammatical construction of the sentences is the same.

The Tavoyers consider themselves as descendants of Arakanese colonists, and their view is supported by a general resemblance in character, and by some peculiarities in their dialect, which has many Arakanese provincialisms.

The Khyoung-tha are found in Arakan, partly in the Akyab district and partly in the hill tracts. They are generally of Burmese stock, but three of the seven classes into which they are divided, viz, Da-la, Morn-htouk, and Rook, are said to be descended from Talaing, who came over to Arakan with a Peguan princess, who was married to an Arakanese king in 1588 A.D. Tattooing is practised, but not to the same extent as in Burma. Though professedly Buddhist, yet spirit worship is much more practised. The hair is worn in a knot, but further back on the head than is the case with Burmans and the modern Talaing. The written character was the same as that used in Burma and Arakan, but now they call some letters by different names, and the character differs greatly from the Burmese form. According to Sir A. Phayre, they are a mere branch of the Arakanese, which separated from them after they had occupied Arakan. It seems probable that the Kyoung-tha are the descendants of those Arakanese who had settled in the hills, who received but little Buddhism or civilisation, and adhered more to their primitive form of spirit worship, which has kept them apart from the Arakanese. The name denotes simply "sons of the river."

The Khami and Mro, who in this province are found only in the hill tracts of Arakan, are considered to belong to the Burmese stock†. They differ but slightly from each other in language and in customs. "Khami" is the Khami word for "man." "This hill tribe belongs to the same great family of the human race as the Myam-ma, their language being apparently of the same structure, and their physiognomy alike. They have black straight hair, high cheek bones, oblique eyes, and scanty beards. They appear, in short, like the Ra-khang-tha (Arakanese) in a more rude state of existence"‡. The Mro appear, according to the Arakanese history, to have been in the country when the Myam-ma race entered it, but the same authority implies that both races are of the same lineage. Four or five generations ago, the Khami dwelt on the mountain ranges to the north-east, but being driven south-west by their more warlike neighbours the Shan-doo, gradually drove the Mro and Khyoung-tha down the valley of the Kooladan.

"From tradition and such scanty historical notices as have survived, we are led to look to the east coast of India, and especially to the ancient Kalinga and Talingana, as

* *British Burma Gazetteer*, vol. I, page 161.

† Sir A. Phayre, Captain Satter, and Mr St. John hold this view.

‡ Sir A. Phayre's *History of Burma*.

the countries which, at a very remote period, traded with and colonised the coast of Pegu. The people of Pegu are known to the Burmans, to the Indians, and thence to Europeans by the name of Talaing. This word is derived from Talingana, and the name, which was strictly applicable only to the foreign settlers, has in the course of time become applied to the whole people. The early establishment of a colony for trade on the coast of Pegu by settlers from Talingana satisfactorily accounts for the name Talaing. But the Peguans call themselves by another name—Mun, Mwon, or Moon.*

Their original language has now almost disappeared. The Burmans, since the conquest of Pegu by Alompra in 1757-58, have strongly discouraged the use of the Mun language, and after the war with the British it was furiously proscribed. Consequently in little more than a century the language of about a million of people has become extinct.

In physical appearance the Mun people are scarcely distinguishable from the Burmans. They are, however, shorter and stouter, and generally lighter in complexion than the Burmans. Pure Talaings also can and do grow whiskers, mustache, and beard.

While the physical characteristics among the Mun would lead us to class them with Indo-Chinese, then language points to a different conclusion.

Dr. Mason in his work on Burma pointed out the remarkable similarity between the language of the Mun of Pegu and that of the Horo or Munda, people of Chutia Nagpur, called Kols. The first syllable of the word 'Munda' is used to designate the language of several tribes in the western highlands of Bengal, and is identical in sound with the race name of the people of Pegu. It appears, therefore, probable that the people of Pegu are of the same stock as the Kols and other aboriginal tribes of India who may have occupied that country before even the Dravidians entered it. Cosmo de Koros in his Tibetan dictionary defines 'Moon' as a general name for the hill people between the plains of India and Tibet†. "Assuming that a people of that name once inhabited the eastern Himalayan region and migrated to the south, we have now no means of tracing whether the Mun of Pegu came direct down the course of the Irrawaddy, or, parting from their kinsmen of the Kolarian tribes in the lower course of the Ganges or Brahmaputra, came through Arakan to their present seat. There appear now to be no indications of their presence either in Arakan or the country of the Upper Irrawaddy, though more careful enquiries into the languages of some of the wild hill tribes between Arakan and Manipur might possibly show their track.

"The Dravidians of Talingana, who, beyond all doubt, came by sea to the eastern shores of the Bay of Bengal probably a thousand years before the Christian era, found the Moon rude savages, who even some five centuries later were called 'bhila,' or ogres. The Dravidian colonists have merged into the mass of that wild race. Their name remains in the word 'Talaing,' but is known only to foreigners, and is not acknowledged in the language of the people‡. The countries from which the kings of Pegu and Tha-htoon are said to have derived their origin are Karanaka, Kalinga, Thoobinga, and Bij-ja-na-ga-ran. These may be recognised as Karnata, Kalinga, Vengra, and Vizianagram on the south-eastern coast of India. The word 'Talingana' never appears in the Peguan histories, but only the more ancient name 'Kalinga'.

* Sir A. Phayre's *History of Burma*

† *British Burma Gazetteer*, vol. 1, page 156

‡ Sir A. Phayre's *History of Burma*

The Talaing language has the intonations characteristic of the Chinese family, but to a less extent. The roots are principally monosyllabic, but, as in both Burman and

Talaing language
Karen, many are formed on the polysyllabic principle

Talaing is written from left to right, with no separation between the words, and the alphabet is composed of circles or segment of circles. Nearly all the simple characters are the same as in Burmese, and many have the same sound. It is remarkable for its numerous compound consonants, many of which are not found either in Chinese or in Indo-Chinese languages.

The grammar of the language is exceedingly simple, the subject usually preceding the verb used, the object following it, as in English.

"In its vocables Talaing is the most isolated language in further India. Its roots are not allied to Tu Burman, Karen, Thong-thoo, Kyeng, or any other language spoken by the Indo-Chinese nations."*

It is not either cognate with the Chinese or Thibetan or any known Tartar language. Dr. Mason states that the Talaing language has a radical affinity with the Kol of the mountainous region of Central Hindustan.

In dress, manners, habits, and system of cultivation the Talaing differs little from the Burman, but there is something in the physiognomy which, if the blood is tolerably pure, enables one who has resided for some time in the country to decide whether a man or woman is of the Talaing or Burman race.

Though the Talaing have been Buddhists during so many centuries, yet they are exceedingly superstitious. The worship of nat is the prolific source of many strange observances. Everything that causes pain or threatens danger is attributed to the agency of wicked spirits, and, accordingly, sorcerers, conjurers, and crafty men and women without number thrive on the credulity of the ignorant masses. The original worship has not been entirely uprooted by the adoption of Buddhism, but by a kind of tacit compromise the two have continued side by side on a footing of perfect tolerance.

The Karen have no one distinctive name for themselves, and to them the

Kareng or Kircu
Burman word 'Karen' is unknown except as being their name in Burmese. The nearest approach to it is 'Ka-ya,' the name by which the Karennes or Red Karen call themselves, and 'Ka-yay' by which some of the Bghai clans are known amongst themselves. They are undoubtedly not of the same race as the Burmans or as the Talaings, and it is certain they are not the aboriginal inhabitants of the country now known as Burma. The Karens pointed out to Dr. Mason the precise spots where they took refuge in the days of Alompra, and informed him that the cities the ruins of which he found in their jungles were in ruins when they first came to the country. They had a tradition that they had come from the north, near Ava, and that all the Karens of Burma, Siam, and Pegu had come from that region originally.

Their earliest traditions told of a "river of running sand" which their ancestors had crossed before coming—a fearful trackless region, where the sands rolled before the winds like the waves of the sea*. The Chinese pilgrim, Ta Hian, describes the great desert of Gobi, which extends from Mongolia to Yarkand and from Drungaria to Thibet, and mentions the "river of sand" which it was so terrible to cross.

The Karen traditions point unquestionably to an ancient connection with China, and the custom of offering to the names of their ancestors is as common amongst the Karen as it is with the Chinese. The real home of

* Dr. Mason

the Karen people is the vast series of lofty mountain ranges that lie between the Irrawaddy and Menam rivers, and from the south of Yunnan province to the extremity of Mergui *

The Karen method of cultivating land is such as is carried on by all hill tribes in Indo-China. The hills are not terraced, but the forest on the mountain sides are cut down, the timber and grass burnt, and the seed sown amongst the ashes. As the next rain washes away the soil, another crop cannot be raised on the same spot for some ten to fifteen years, and each village, rarely containing more than 30 or 40 houses, requires a wide extent of mountain land to have a sufficiency of cultivable spots.

They have traditions of the creation and fall of man, which coincide in a singular manner, as far as they go, with the Mosaic story. Perhaps it is equally singular that they go no further than the fall of man, and contain no allusion at all clear to the deluge. This fact is in itself almost sufficient to dispel the idea that the Karens derived their traditions from early intercourse with Semetic nations, or at a later period with Europeans. The demon worship obtaining among the Karen tribes is similar to that of the Thibeto-Burman hill tribes to the westward †.

The Karens appear to have thrice emigrated,—once from the central plateau, once from Northern China in about the second century, when they settled near Ava, and again in the fifth or sixth, when they spread over the mountains between the Irrawaddy and the Menam.

The Karens are divided into three† tribes, and these again into clans distinguished by their dress and by their dialect, viz —

- I —Sgaw—so called by themselves
 Called Myit tho by the Burmans
 " Shan by the Pwo
 " Pa-koo by the Karennee
 " White Karen by some English writers
 " Burmese Karen by some English and Burmese writers
- II —Pwo—so called by Sgaw
 Called Sho by themselves
 " Myit cheng by some Burmans
 " Talang Karen by some Burmese and English writers
- III —Bghai—so called by the Sgaw
 Called Pyc ja by themselves

I —Sgaw

(a) Ma-nu-plga.

Found in Toungoo. One of the few sects that have any domestic animals, besides fowls and swine. By some they are considered a portion of the Pwo tribe on account of the nasal sound of their dialect. The majority are now Christians.

(b) Pa-koo

Dress —White tunic or blouse without stripes, and with a narrow border of embroidery at the bottom. Dialect closely allied to that of the Pwo. Over 2,000 have embraced Christianity.

(c) We-wa

Dress —Of all kinds. Their dialect is a mixture of the Pwo, hence their name 'We-wa,' meaning backwards and forwards. They are in a very low state of civilisation. Until latterly, the women did not know how to weave.

* Forbes' *British Burma*, page 40.

† Forbes' *British Burma*.

‡ Eight distinct Karen tribes are known, who speak dialects so diverse that they cannot understand each other, but the larger proportion of the roots of each dialect are of common origin.

II—Pwo

- (a) Mo-pgha, near Taungoo in a few villages
 Called Taw hya by the Burmans
 " Pie do by some of themselves
 " Pie zaw by some of themselves
 " Plaw by some of themselves

Dress—White blouse with red perpendicular lines

Language—They have two or three different dialects, and hence the names given above, all signifying then term for "man" They sacrifice a *black* bullock to "the lord of the earth" Their morality is exceedingly strict and stern Many are Christians *

- (b) Ta roo—so called by the Karennee
 Called Koo hto by themselves
 " Pa-dong by the Gai kho
 " Blac loo by the Burmese

Dress—Very short trousers The women wear short togas, and besides brass coils round the neck, and below the knee also The men shave the head, leaving a long tuft of hair on each temple

Their dialect shows they are of the Pwo tribe They are peaceable, except amongst themselves

- (c) Shoung, near the northern borders of Taungoo

Dress—White trousers with radiating red lines at the bottom.

- (d) H-shawio—so called by Bghai
 Ha shoo—so called by themselves
 Found in Northern Taungoo

Dress—Trousers They are a tall, slender, active, and warlike race. The women are ugly, ignorant, and degraded

- (e) Gai kho—so called by the Bghai
 K-roon—so called by themselves
 Pra ka young—so called by themselves
 Pa doun—so called by the Karennee

Dress—Trousers of silk and often handsomely embroidered red lines at the bottom, radiating like the rays of the rising sun

Manners—They are fierce and savage, and consider themselves as superior to all other Karens The men are stout, tall, and muscular, daring in adventure and warlike in disposition The women are large and fair, and often with ruddy complexions They have two distinguishing peculiarities—then hatred of ponies and elephants, which are not allowed to enter their villages, and for which they will neither provide nor sell fodder, and the custom, now dying out, of burying a slave with every deceased slave-holder and elder

III—Bghai

- (a) Pye ya—so called by the Sgaw and generally called by themselves
 Karen nee—so called by the Burmans
 Red Karen—so called by the English
 Yong aing—so called by the Shans
 Ka ra—called by themselves
 Pra ka ra—called by themselves
 Bghai-moo-hte—called by the other Bghais
 The pya—called by the Gai kho

* Dr Mason's Journal of the Asiatic Society, Part II, No 1, 1866

† Kbu hta—Dr Mason

‡ Signifying "monster" or "ogre"

Dress—Red trousers with perpendicular, very narrow black and white stripes, sometimes white with black or red stripes. Turban bright red.

They occupy the country north of British territory, and are divided into Eastern and Western Karennee, each perpetually at feud with the other. Some have emigrated into British territory. They are very ferocious, preying without mercy on their neighbours—a practice to a great extent abandoned by the Western Karennee. Those who have come into British territory have to be regularly watched, as they commit dacoities and robberies whenever they can. If caught, they confess readily, but are true as steel to their comrades.

'Tha-vie' or 'Tha-vie-la-kha' is a Red Karen name for a people of their own tribe living ten days' journey above them on the Salween, and who were separated from them when driven from Ava sixteen generations ago.*

- (b) Bghai ka-tew, Toungoo
 Called Tunic Bghai by the English
 „ Liep-pya gyeet by the Burmans

Dress—White tunic with perpendicular red stripes

- (c) Bghai ka-ha.
 Called Pant-Bghais by the English
 „ Kareng-a yeng by the Burmans
 „ Liep-pya ngay† by the Burmans

Dress—White trousers with red radiating lines worked in them at the bottom. They inhabit the western slopes of the hills between the Salween and the Sittang near the frontier. The inhabitants of the villages nearer the plains are to some slight extent civilised, but those of the villages in the interior are comparatively in a state of barbarism.

- (d) Lay may—so called by the Burmans
 Pray—so called by the Karennee
 Brec—so called by the Karennee

These go about almost naked. They are the Ishmaelites among the Karens, and are savage, treacherous, and ignorant.

- (e) Ma-noo-ma-naw

Dress—Trousers. Little is known of them.

- (f) Tshaw kho

Dress—White trousers ornamented with red or black stripes.

The preceding tribes, though one in language, differ materially in their physical characteristics. Those of them who

usually inhabit the lowlands resemble in their physical traits the Burmans who inhabit similar localities more than they resemble the Karens that dwell in the mountains. They are a short muscular people with large limbs, larger than the Burmans, while the mountaineers are usually of little muscle and small limbs. The commonly accepted idea, that

* Dr Mason

† "Great Butterflies—" Dr Mason

‡ "Little Butterflies—" Dr Mason

mountaineers are stronger and hardier than lowlanders, does not hold good in this case, as the mountain tribes are a weaker people than those who live on the plains. The cause, however, may not be due to locality *

In stature all Karens, excepting perhaps the northern tribes, are shorter on an average than Europeans. The average may be fixed at from *five feet four and a half to five feet five*. The average of the women at *four feet nine* *. Though small in stature, the Karens appear to be tolerably well proportioned.

The Northern Karens in those parts of their body which are not exposed are as fair as the Chinese, and young people, male and female, among the Gai-khos and Northern Bghais often show red and white in strong contrast on their countenances. The hair is straight and coarse, usually jet black, but a few have brownish hair.

The eyes are commonly black, but to the north many hazel eyes are met. The head is pyramidal. The breadth of the face across the cheek bones wider than across the temples, and the bridge of the nose rises only slightly above the face. The whole countenance is, in typical specimens, Mongolian. Education affects the countenance, and the Karens that have been educated in the mission schools look like quite a different tribe from their wild countrymen in the hills.

The Karens rarely marry with other races, but among those who have settled near the Burmans, a Burman is sometimes found with a Karen wife; but mixed families are so rare as to be well known.

Amongst the Karens children receive their names in a curious manner. Often a name is selected indicative of the state of the parent's mind at the time of its birth. Thus a man rejoicing in the birth of a son will call him "joy." A mother is suffering and calls her daughter "grief." One is called "father-returned," another "harvest," because born at harvest time. And, for like reasons, we have "new-house," "sun-rise," "full-moon," "February." Some are called according to color, and "yellow" is as common in Karen as "Smith" in English. The animal, vegetable, and mineral kingdoms are all indented on for names, hence "tigers," "herons," "mango-fish," "cotton," "gold," "tin," are all included in Karen nomenclature.

All Karens marry young, and it is very rare to find either man or woman over 25 years of age that has not been married.

Their betrothal and marriage ceremonies are somewhat elaborate. Amongst the Bghais it is considered correct to marry a relative, a second cousin being deemed most suitable.

The Karen language is monosyllabic, and has consequently no inflexions, but it is amply provided with suffixes and affixes. Each clan has its own dialect, but all those known resolve themselves into two classes,—those with final consonants, and those without them.

The Pwo Karen tribes north of British Burma appear to use dialects of Pwo, and the dialect of those on the east differs from that of those on the west.

The Karens are averse to discipline, and when, about the year 1867, it was intended to raise two companies of them to suppress dacoits in the Salween

district, it was found impossible to make soldiers of them, and Shans and Thong-thoos were to a great extent employed instead. There are at present about 158 men of the Karens in the police force. They are gradually taking to police work, but will not serve long. As soon as they make enough money to marry they withdraw, without permission if there is any delay in answering their request for discharge, but they carry away habits of discipline and a greater readiness to unite in resisting all attack.

The Red Karens originally acknowledged one chieftain, but within the last hundred years have split into two separate tribes—Western and Eastern Kareunee. This tract of country is of considerable political as well as strategical importance.

The Shans are immigrants who have appeared in the lower portions of the valley of the Sittang (Tait-toung) and of the Irrawaddy of comparatively late years. By themselves they are called Tai.

The name 'Tai' is appropriated by each division, "except the Siamese, who use the aspirated form and call themselves 'Htai'." This name is said to mean free. But if it be so, the northern divisions have lost it in the unaspirated form *."

They are the most extensively diffused and probably the most numerous of the Indo-Chinese races, lapping the Burmans round from north-west by north, and east to south-east they are found from the borders of Manipur (if the people of that valley have not been indeed themselves modified by Shan blood) to the heart of Yunnan, and from the valley of Assam to Bangkok and Kamboja. Everywhere Buddhist, everywhere to some considerable extent civilised, and everywhere speaking the same language with little variation—a circumstance very remarkable amid the infinite variety of tongues that we find among tribes in the closest proximity of location, and probably kindred, throughout these regions. This substantial identity of language appears to indicate that the Shans had attained at least their present degree of civilisation, and a probability of their having been united in one polity, before their so wide dispersion and segregation.

The traditions of the Siamese, as well as of the Northern Shans, speak of an ancient and great kingdom held by this race in the north of the present Burmese Empire, and of the traditions the name of "Great Tai" applied to the people of that quarter appears to be a slight confirmation. The kingdom of Siam is now perhaps the only independent Shan State in existence. All the others are subject or tributary to Ava, China, Cochinchina, or Siam †.

This Northern Shan kingdom may have been Pong or Mogoung, of which Captain Pemberton has given some history. But Shan traditions assign the south-west of Yunnan as the seat of the empire, and affirmed that the capital Kai-khao-maw-long (the great and splendid city) was situated on the banks of the Shway-h river, which joins the Irrawaddy in lat 24°. According to Pong chronicle, this was in existence in the year 80 A.D.

In their features, manners, and fondness for agricultural pursuits, the Shans strongly resemble the Chinese. The majority of those in British Burma are gardeners or dealers in cattle and precious stones.

* *British Burma Gazetteer*, vol. I, page 173

† *Yule's Mission to Ava*, pages 291-92

The Northern Shan States are named as follows —

Eastern	Western.
1 Mynecha	6 Hotha
2 Mynechon	7 Latha.
3 Sayfan	8 Mynela.
4. Mynemaw	9 Sanda.
5 Mynewun	10 Myneteetee

The population of these States would be probably 250,000 *

Dr Anderson, describing the Shans between Bhamo and the Chinese frontier, writes "The Shans of these valleys are a fair race, somewhat sallow like the Chinese, but of

Appearance a faintly darker hue than Europeans They have red cheeks, dark brown eyes, and black hair The Shan face is usually short, broad, and flat The nose is well formed, the bridge being prominent, almost aquiline, without the breadth and depression characteristic of the Burman feature The lower jaw is broad and well developed The higher classes seem to be distinguished from the common people by more elongated oval faces and a decidedly Tartar type of countenance "†

They are not a tall race, the average height for men scarcely reaching five feet eight

The great body of the Shan population is engaged in agriculture and the care of cattle They are essentially a race of horse-breeders, whose wealth is estimated by the number of these animals They are a simple-living people, among whom drunkenness and licentiousness are all but unknown They are very superstitious, and believe in ghosts, furies, nats, and evil omens

They are a good-natured, contented race, and, compared with the jovial Burmans, a quiet and rather sedate people

The dress of the male peasants is a double-breasted loose jacket reaching to the loins and buttoned down the right side, the buttons frequently jade, amber, or silver The turbans are thick blue woollen cloth, with a long fringe at the end, which is usually wound up with the pigtail and brought round the outside In rainy and sunny weather a very broad straw hat covered with oiled silk is worn over the turban The trousers are very loose, and reach only a little below the knee The shins are bound round with long strips of blue cloth

The women wear a neat turban, a loose jacket closely fitting round the neck, a petticoat of thick cotton stuff, and over this an ornamented skirt They wear ornamented leggings and shoes

The Western Shans have lost many of their distinctive customs from their intimate association with the Burmans, while the Eastern Shans have in many instances preserved their ancient civilisation and peculiar national customs, which contrast so markedly with those of the Chinese and Burmans

The different divisions of the "Tai" family have alphabets of their own The Shans follow the Burmese alphabet closely, one-half of their letters being identical in form with the Burmese letters, and, like the Burmese letters, they are circular The letters of the Tai-mow, who are found in the extreme north-east of Burma and in Yunnan, are the same as those of the Shans, with two additional characters, which are diamond-shaped instead of circular, which the Tai-mow attribute to Chinese influence, Un-

Language doubtedly, the language of the different divisions of the Tai family was originally the same, but in process of time became

* Major Sladen

† Dr Anderson's *Expedition to Yunnan*

separated into several dialects. In Zimmay among the Laos, and in Bangkok among the Siamese, much of the common language of daily intercourse is essentially the same as among the Shans, but there is a greater dialectic difference between the Shans and Laos and Siamese than there is between the Shans and the Tai-mow. This similarity of language among the Tai family is a sure evidence that there was originally one Tai language from which the present diversity has sprung.

The Shan language is monosyllabic, but it has many polysyllabic words of Burmese and Shan origin. Under the influence of many years' subjugation to Burma, Burmese words have been introduced and domesticated. Their religious books being received from the Burmans, has been an abundant source of the addition of Burmese and Pali words. Indeed, their religious language is a mosaic of Shan, Burmese, and Pali.* Such Shan books as are written in the common language of life, and they are few, are called "books in the colloquial style." The greater portion, written in a style more or less metrical, are called "books in the preaching style." In these many words not employed in daily life are used, which are called "leaves and flowers," and sometimes this is carried to an extent which renders what is read almost unintelligible to an ordinary listener. Unlike Siamese, Shan has no tonal signs.

Yule divides the Shan into twelve States—

I—Mobyay	VII—Tham nee
II—Mokmay or Moung may	VIII—Kun, pi or Maing mang
III—Monay	IX—Mong, lon, son
IV—Nyoung yuway or Nyoung shway	X—Kung, hun
V—Legya	XI—Kung, tun
VI—Theebo	XII—Kung, khon

The outlying tribes which, considering our present knowledge and the diversity of opinion amongst those who have investigated the question of their origin, cannot safely be classed as members of any one of the main stocks, may be divided into two classes,—those whose tribal relations are as regards those stocks doubtful, and those who are clearly separate. The former includes—

The Zabang or Yabang,	Anoo or khong tao,
Chin,	Khaw or koo kie,
Shandoo,	Toung thoo,

and the latter—

The Selings

The Yabaings are found on both the eastern and western flanks of the Pegu Yoma. Rude, wild, and ignorant, they are found only amongst the hills. Their language is Burmese with a strong Arakanese accent. Some are cultivators and many breeders of silkworms. According to Dr. Mason, they are of Burmese stock, and this view is confirmed by their language. In the eastern Yoma these people, though of pure Burman descent, have come to be regarded as a distinct tribe.

The Chins are found occupying both the eastern and western flanks of the Arakan Yoma mountains, and towards the north of British Burma they have spread eastward, and crossed the Irrawaddy and even the Pegu Yoma. The present Chin country, however, is really the Arakan Yoma range. They are essentially hill-men rarely found in the plains. Their own view is that they belong to the

* Mr. Cusling from *British Burma Gazetteer*, vol. I, page 178

Burmese stock And they have a tradition that at one time their ancestors occupied the plains of Ava and Pegu, but strangers came and drove them out *

The head of the Chin church is the Passin He resides on a mountain by the side of a river, and by his descendants in the male and female line the office of prophet and priest is continued

They worship among other things a thick bushy tree, bearing a small berry called the subri, and under it they sacrifice

Religion

Another object is the thunderbolt, or what passes for such They burn their dead, and the bones plucked from the embers are preserved till they can be deposited in the family burying-ground The position of these burial-grounds is carefully concealed

They have a custom peculiar to themselves of tattooing with deep blue lines the faces of their young women as they arrive at the age of puberty It is said to have been adopted to put a stop to a habit of their Burmese rulers of carrying off their most lovely maidens

Their dress consists, for the women, of a short waist-cloth open on both sides and a blouse or smock frock (short in the north, but worn longer in the south) The men knot their hair over their forehead, and the waist-cloth is reduced to the smallest possible dimensions, in fact, it can hardly be said to have the slightest pretensions to decency †

Marriages are so far religious ceremonies that the Passin is consulted about them

The bride may prove unfaithful, if so, the adulterer is fined, and the wife is restored to former favour With unmarried women the custom is different, simple discovery is fined The birth of a child creates a claim on the part of the female The offender must either marry her or pay the fine over again and take the child, the fine being a bullock The damsel starts *de novo* as a damsel

Cousins marry, but not brothers and sisters Intercourse, however, between even these is possible and contemplated The fine is a bullock to the father

A divorce costs a bullock Murder costs ninety rupees Ordinary theft is not much punished

The Shandoos inhabit the mountainous region east and north-east of the

Shandoo

Blue Mountain, a peak in the Arakan Yoma range at the extreme north-west point of the province,

but there are outlying tribes on the Moo and head waters of the Ie-mro, and it is impossible to say how far they extend north and north-east Amongst themselves they are known as Henma They seem to be among the more civilised of the wild tribes, for they are rich in poultry and pigs, and some amongst them have wooden houses They are polygamous by right, but rarely so in practice They can marry two sisters at once, therein differing entirely from the Burmans

They bury their dead in a supine position in a grave lined with stones

Daughters are altogether excluded from succession Widows are left to the charity of the eldest unmarried son, who inherits all the property They sacrifice animals to the sun and moon In appearance they resemble the Khamie, but their language is very different

The Khyaws are considered to be of the Kookie family The men knot

Khyaw

their hair at the back of the head and shave their forehead The women plait it into two tails,

* Latham's *Descriptive Ethnology*, vol I, page 168

† *British Burma Gazetteer*, vol I, page 185

which are brought up over their forehead. Physically they greatly resemble the lower class of the Bengali peasantry in Chittagong

They worship stones, which they set up in an upright position in their villages. There are very few in British Burma

The Anoo or Khoung-so are a tribe found in the north of Arakan of which but little is known. They dress like the

Khami, but have a distinct dialect, which contains many words and expressions intelligible to the Manipuris. They bury their dead, but in the forests

The Thoung-thoos are now found in and about Tha-htoon in Tenasserim, with outlying villages on the banks of the Salween, many miles away to the eastward, in the

plain country between the Salween and the Hlung-bhwaï on the Daw-na range and in the valley of the Houg-tha-raw. They are sometimes found in the extreme south of the narrow mountainous country forming the lower portion of Tenasserim

Beyond British territory they are found in the south-eastern part of Upper Burma. In the Shan States as far as Monay, and, according to Dr. Mason, in Cambodia

The word 'Thoung-thoo' in Burmese signifies "hillman." According to their own traditions, their capital was once established at Thitung under a monarch of their own. They are said to be Buddhists, and to have books and priests of their own,* the name they give themselves is Pan-an. Their dress consists of trousers, jacket, and turban, almost always of dark blue, very like that worn by the Northern Shans on the borders of China, south of the Ta-peng

In stature the Thoung-thoo is short, strongly built, and swarthy, he is courageous and warlike, docile and obedient,

Appearance

very affectionate towards those who gain his confidence, but his character is dashed with the treachery of Asiatics, with strong feelings curbed for long, but at last bursting all bounds, hating the Burmans with a bitter, undying hatred, and despising them, successfully meeting them in the field, one to two, unarmed save with swords. His character is that of the race whose dress he wears

Captain Foley from their habits, customs, and personal appearance believes the Thoung-thoos to be a remnant of the Tanjores or Huns, and quotes the following extract from Gibbon's *Decline and Fall of the Roman Empire* in support of his opinion: "One of the princes of the nation (Hun) was urged by fear or ambition to retire towards the south with eight hordes, which comprised between forty and fifty thousand families, and he obtained under the title of Tanjore a convenient territory on the verge of the Chinese Empire" in 48 A.D.

Their habits are curiously wandering. They till no land, most families have no land under cultivation beyond a garden. The men of every family proceed at least once a year on distant expeditions, ostensibly for trade and barter, but really often on predatory excursions.

The Kachins belong to the race of Singphoos, who are distributed all over the mountains that define the valley of the Irrawaddy north of Hatha, and on the hills that occur between them, as far as the wall of mountains

Kachin.

that closes in the Kampti plain to the north. They may be said in general terms to be confined between the 23rd and 28th parallels of north latitude and the 95th and 99th degrees of east longitude.

They claim to have come originally from the mountainous country along the main stream of the Irrawaddy to the north-east of the Mo-goung, and the Shans of the Hatha and Sanda valleys say that 200 years ago they were unknown in those districts*. They call themselves Chungpaws, which is their name for man. Their clans are very numerous, but do not appear to extend east of Momien.

They are described by the Burmans as blood-thirsty, treacherous savages,

Character

but the secret of these evil reports of the Burmans is that they have been so maddened by the intolerable oppression and extortion to which they have been subjected, that they retaliate on the Burmese Shan villages of the district. They are not a courageous people, and their method of attack is to surprise unsuspecting villages during the darkness. They generally get well drunk before one of these raids. They are habitually ready for strife, and frequently at feud with one another. They are lazy, thievish, and untrustworthy, their savage curiosity leads them to pry into every package entrusted to them, which, with their incurable habits of pilfering, render them unfit to be employed as porters.

They are a perfectly wild race of cateran mountaineers, considering themselves entitled to levy blackmail on every one passing through their district, and each petty chief tries to represent himself as an independent Tsaubwa, with the full control of the portion of route near his village. They supply themselves with most of the necessaries of life by rude cultivation, but are altogether dependent on their neighbours for salt and dried fish.

They are drunkards and filthy in their habits.

On the other hand, the Kachin is noted for his hospitality, and every house of any pretensions has always a strangers' hall, in which the guests sleep and are fed by the household.

The dress of the men is a blue jacket, short loose breeches, supported by

Dress

a blue cloth wound round the loins, a blue turban, an embroidered bag containing his pipes, tobacco, opium, betel, &c., and a bamboo filled with shamshée (the liquor he gets drunk on). A dáh fastened to a bamboo hoop, a number of fine rattan hoops below the knee, and a leek, flower, or small piece of bamboo in a large hole in the lobe of the ear.

The dress of the Kakoo men is very different from the foregoing. They wear the Shan jacket, but instead of the trousers, a broad piece of thick blue cloth with a wide red embroidered woollen margin wound round the loins like a kilt. They wear no turban, and their hair is cut short over the forehead, but left long behind. The women wear a kilt of very scanty dimensions, rarely coming below the knee, and a short jacket covering the arms and breast.

Morality is at a very low ebb amongst the Kachins, as it is not considered a disgrace for an unmarried woman to be a mother, and is no drawback to her future marriage.

The women are regarded as little better than beasts of burden, and the drudgery of household work and collecting of firewood falls on them.

The men do little or no manual labour, and their time is chiefly spent in wandering from hamlet to hamlet among their friends, smoking opium and drinking shamshee.

The weapons of a Kachin are his *dáh*, spear, matchlock, cross-bow, and poisoned arrows. The spear is thrown with unerring aim.

When a Kachin dies, the fact is announced to the neighbouring villages by the firing of guns, at which signal the people repair to the house of the deceased. There is much feasting and drinking, a small piece of money is put into the deceased's mouth, the body is dressed in its best clothes and buried.

Their language is monosyllabic, and is spoken in an undulating tone, each sentence terminating in a high key. They have no written language.

They have a very imperfect idea of the deity, their worship being confined to a species of demonology or nat worship.

Slavery is prevalent among the Kachins, the slaves being generally stolen in youth from some adjacent village.

The Kachins are governed by chiefs or *Tsauhwas*, which have each a hill or district from which they derive their title and name. They have absolute power, but do not seem to use it oppressively. The chiefs have subordinates called *Panmines*, who advise and assist the *Tsauhwas*. They are generally selected from among the headmen of the district and elders of the people.

The *Lee-saws* are an uncivilised tribe, occurring on the hills about the *Hotha* and *Sunda* valleys, and appear to be the same people as the *Leisus* on the northern extremity of *Yunan*. They live in villages of their own apart from Kachins, who regard them as an inferior race. They are a small hill people, with fair, round, flat faces, high cheek bones, and a slight obliquity of eye. The dress of the women resembles the costume of the Chinese *Shins*, with the exception of the turban, which is made of coarse white cloth, patched with blue squares and trimmed with cowries. One end is allowed to hang down the back of the neck. They wear close fitting leggings, made of squares of blue and white cloth, and a profusion of rattan, bamboo, and straw hoops round the loins and neck, in addition to necklaces of large blue beads and large brass earrings. Their language has a strong resemblance to the Burmese, and it is therefore probable that both are sprung from one stock.

The following are some of the clans of the Kachin between *Momen* and the *Irrawaddy*—

Karas	Nurans	Kakoos
Murrows		Pungans
Lahones	Atsoos	Tsingwas

On the hills near *Sanda*—

Lakones	Laphins	Cowries
Murrows	Moulas	Lawangs
Mumuts	Yoyins	Mimsahs.

And on those about *Hotha* are the *Khangs*.

The *Chitans* or *Khan-lungs* are found on both banks of the *Irrawaddy* about and above *Bhamo*. *Latham* in his work on descriptive ethnology, after describing the various tribes inhabiting Burma, says "Most of the tribes under notice have nothing to lose but their pagan creed before they become ordinary Burmese, a little ruder perhaps than their fellows of *Ava*, but still ordinary Burmese."

Yule considers the population of the Burman empire, in the most liberal view of what can be included under that designation, does not exceed 3,600,000, and probably does not exceed 3,000,000, viz —

Shan States	250,000
Kans	1,000,000
Burma proper	1,200,000
Other tribes	1,150,000
	<hr/>
	3,600,000
British Burma	2,969,610

All Burmans are, intellectually at least, strict and conscientious atheists.

Religion and education But, however consistent in their views as taken by the bare understanding, it is impossible for them practically to repress the action of their naturally inherent religious faculties. Dogmatically their religion or philosophy admits no recognition of an eternal God. But their conscience or religious instinct leads them frequently to speak in a way consistent only with such recognition. Theoretically, they are atheists, practically, they are pantheists, or even deists.*

In ancient times the religion of the people of Burma was Shamanism,† in common with the great nomadic races of high Asia, of which they are an off-set. This debased system of spirit worship has been superseded by Buddhism, but it still lingers in the land in the form of adoration and dread of Nats or Dewas, which order of beings has been introduced into the Buddhist system. This worship, though in opposition to the more exalted and purer doctrines of primitive Buddhism, is nevertheless countenanced by the Buddhist priesthood, and a large portion of the worship of the Burmans, from the highest to the lowest ranks, consists in the performance of superstitious ceremonies and offerings made for propitiating evil nats, and obtaining favours and temporal advantages from good ones.

Buddhism is the most widespread religion now existing on the earth, and one which in its various branches, according to statistical tables published by Mr Rhys Davis, holds beneath its sway the minds of 500,000,000 of human beings, or 10 per cent. of the estimated population of the world. During an existence of nearly 2,500 years, the doctrines of Gautama have been propagated by persuasion alone, and though Buddhists have often been persecuted, no instance is on record of a religious war having been waged by them, or an attempt made to spread their faith by force in any part of the world.

The Buddhist doctrines appear to have been first propagated in the country of the Moon or Talang race, whose capital then was Tha-thway. Two missionaries ‡ were despatched from India to this city in the year 308 or 310 B C. By their preaching they seem rapidly to have gained the confidence of the people of the country, many of whom shortly entered the priesthood, and the king himself was ultimately converted. The Buddhist doctrines were propagated here, as elsewhere, orally, and the Talangs did not possess the Buddhist scriptures in a written form until they were conveyed to them from Ceylon in 450 A D by Buddhigosa. In 1080 the Burmese king of Pagan having conquered the Talangs, took these scriptures with him to Pagan, as also the most learned of the priesthood. During this king's reign and up to 1214 A D a great revival of Buddhism took place at Pagan, and many new Buddhist temples were built.

* Yule's *Mission to Ava*, page 233

† Fyche

‡ Named Oo-tara and Than na.—Fyche.

As to where and by what means the Burmans first obtained their knowledge of Buddhism no authentic record exists. Sir A. Phayre is of opinion they were converted by Buddhist missionaries from Gangetic India, who reached Upper Burma through Bengal and Manipur. Rhys Davids and others suppose that Buddhism was introduced from China.* It is not unlikely, however, that the Burmans obtained both their religion and their alphabet through the Talings.

As to such a person as Gautama having ever existed, Captain Yule gives his opinion as follows: "There can be no longer a doubt that Sakya-Muni, Sakia-Sinha, or Gautama, originally called Siddharta, the founder of this doctrine, at least in the shape it has worn since his time, was a veritable historical personage, and, whatever may have been his real participation in the superhuman pretensions that are ascribed to him by his followers, there is strong reason to believe that he was a great and patriotic social reformer, denouncing, as he did, caste and priestly mediation, and inculcating a purer mode of morals than the Brahmins, whom his doctrines so extensively supplanted. Without attempting to speak of the various phases of Buddhism, it may be said that its characteristics everywhere were the inculcation of ascetic discipline and abstraction from the things of sense, as the means through which man can by his own efforts not only attain the final emancipation of Nirwana, but may, even while still a mortal on earth, develop his own moral and intellectual faculties to a divine supremacy."†

The ascetic or mendicant life is the normal life of all true disciples. Its main conditions, as in the West, are continence, poverty, humility, abstraction from the world, tenderness to all living things, the obligation of certain moral precepts, and numerous ritual observances. Those who observe these conditions are called *Thamans* or monks.

In Burma these are called *phooogyees* or *rahews*. The life of a *phooogyee* is still a popular one in Burma, and had still greater charms in troublous times. In the quiet solitude of his monastery, the monk was safe from all the care and turmoil of the outer world, and could not be pressed to serve as a soldier. He was free from all taxation and forced labour, and no robber was sacrilegious enough to attack a monastery.

The Buddhist young or monastery plays an important part in the life of every Burman. It is almost the universal custom for Burmese parents in every class of life to cause their sons to enter the monasteries as novices for the purpose of learning to read and write. Gautama preached that every man should become a monk, and in theory, if not in practice, every man does become a monk at least once in his life. It may be only for a few days or weeks, or it may be for months or years. All this while he is subject to monastic discipline, even if he is a member of the royal family.

As soon as boys are able to read and write, religious books are put into their hands, from which they imbibe religious notions and become acquainted with at least some part of their creed. The consequence is that when they grow up to manhood, a large proportion of them possess a respect for their religion and a kindly regard for monks and monasteries, and there is none of the fear and dislike with which the Brahmins are often regarded by the lower caste of Hindus in India.

Before a lad can obtain the novitiate, he must be at least 8 years of age, and his entrance into the monastery is a marked event in his life. He

* Kytche

† Yule's *Mission to Ava*, page 285

proceeds through the streets to the monastery dressed in the richest apparel his parents can afford, riding on a horse gaily caparisoned, or sitting in a handsome litter borne on the shoulders of four or more men with gold umbrellas held over his head, and accompanied by music and a large procession of kinsfolk. Arrived at the monastery, he is handed over to the superior, his head is then shaved, and his fine dress changed for the yellow robe. From that time his identity is lost, he is subjected to monastic discipline, the monastery becomes his home, and he must go round every morning with his alms-bowl and subsist on the daily food that is given him.

Novices do not generally remain in the monasteries more than a few years, and then they return to secular life, but in the event of their remaining till they are twenty years of age, they can then, if they wish it, receive full ordination, and become passus, or professed members of the order.

The phoongyees in Burma take precedence according to the number of fasts they have kept. Those who continue phoongyees for life are regarded with peculiar sanctity. Every monastery has a *tsayadan*, or abbot, who regulates its affairs and attends to the religious and moral training of its members.

All towns and large villages contain a number of these religious houses, and the country in Upper Burma is portioned off into ecclesiastical divisions or dioceses, subject to the authority of a *gon-ok*, or bishop. The *gon-ok* is much respected, and his monastery outshines all others in the division in the splendour of its carving and decorations.

At Mandalay is stationed the "Tha-tha-na-boing," or patriarch. He is supreme in all matters connected with religion, and, next to the king, is the person to whom the greatest external homage is paid. He is generally made patriarch from having been the king's instructor in youth. It thus generally happens that each king on his accession appoints his own patriarch, the one in office retiring. Great respect is paid by the king to this high dignity of the church. He lives in a magnificent monastery, from the centre of which rises a lofty "shway-pyithal," or gilded spire—a dignity not allowed even to the heir-apparent to the throne. Spiritual commissioners are sent by him from time to time on tours of inspection in the provinces to investigate and report as to whether the rules of the order are duly observed, and if the professed members of the religious fraternity are really qualified for their holy calling.

A priest is allowed to retire from the order, or, as the Burmans express it, "to throw off the robe and become a man," if he finds himself unfitted for the life, but this cannot be done without express permission being first obtained from a legal chapter.

Poverty is strictly enjoined upon priests, the disciples of Gautama possess no common treasure, and a priest is only allowed to possess the following eight articles, *viz*—(1—3) the "theng-gan," or three robes, (4) a girdle for the loins, (5) an alms-bowl, (6) a razor to shave the head and beard, (7) a needle to stitch his clothes, and (8) a water strainer this last to prevent the accidental destruction of life.

The state of a priest when alive is regarded as one of great sanctity, and their very persons thereby rendered holy. Consequently great honours are paid to their mortal remains. They are embalmed and buried with great ceremony. A large amount of honour attaches to the founders of new pagodas and monasteries, and the honorary title of "Phura Taga" or "Kyoung Taga," meaning the builder or supporter of a pagoda, is assumed by them, of which they are very proud. The religious merit attaching to the mere repairs

of such edifices is of very much smaller value in the scale of good works. Consequently many of these buildings are allowed to go to ruin, whilst new ones are founded for the sake of gaining merit and fame

The monastic system in Burma has a practical interest from its being connected with national education. Every monastery has its school, where, in harmony with the national religion, are learnt the same lessons which have been taught from generation to generation for a couple of thousand years. There is not a town or village, scarcely even a hamlet, that has not at least one of such schools.

The instruction of the young is one of the several means by which merit in a Buddhist sense is obtained, and has given rise to lay schools also, or, as they are called, "house schools."

These, though few in number as compared with monastic schools, are of great importance, as female scholars are allowed to attend, which they are not in the others. Owing to these two classes of indigenous schools, there is scarcely a man in Burma who cannot read, write, and cipher.

Major Sladen remarks specially upon an order of wandering priestesses. "One of the peculiarities of Shan Buddhism is that it seems to create a strong desire in the female mind to assume the garb and duties of wandering priestesses. These nuns shave the head, dress in white, and have separate nunneries of their own. It seems to be one of the duties to make annual pilgrimages to the most celebrated Buddhist shrines, whether in China or Burma, and thus she becomes a person of political importance, as on her return to her native state she is the sole dispenser of foreign intelligence. Rangoon is a sort of Buddhist Mecca to those who do not believe themselves perfect in their religious calling until a pilgrimage has been made to the shrine of Dagon. It is doubtless owing to this fact and the itinerant habits of the Shan nuns that the English occupation of Pegu has both been acknowledged and appreciated in the Shan States." Major Sladen attributes to their influence the spontaneous display of good feeling with which Shans, who were left to their own inclinations, have always welcomed British enterprise.

The Burmans are excessively superstitious, and, like all half-civilised and uneducated races, have implicit faith in astrology, alchemy, and witchcraft.

The unseen spirits of nature must be propitiated, and omens must be observed, some days are lucky and others unlucky, and a journey which a dream foretells as unfortunate will not be attempted. Amulets and charms are worn by both sexes.

Burmese books are manuscripts on palm leaves. The leaves are those of the Talipot palm, which is cut in strips two and a half inches broad and in length from one to two feet. These are written on with an iron stylus along the length, leaving a margin of about two inches. The leaves are placed over one another and well rubbed with petroleum, and a piece of thin wood or ivory at top and bottom forms a cover, a hole is made three or four inches from each end, and wooden pegs inserted. In some cases the edges are gilded, and the covers also. For common books a thick black paper is used, which is written upon with a pencil of stearite, the writing may be removed with the hand as from a slate. Such books, called *thabike*, last a long time. They are in one piece of several yards length and folded like a fan.

The literature of the Burman peninsula is more extensive than is generally supposed. It cannot compare in extent and variety with the Buddhist

literature of Thibet and Nepal, nor probably with that of China or Japan, but it is, nevertheless, most important, as containing some of the earliest and probably most authentic recessions of the teachings of Gaudama Buddha. It is not corrupted by the imported Hinduism in the Sanskrit Buddhist books of Thibet, whence also the Chinese seem to have drawn a great part of their version of the Buddhist scriptures. In Burma these were obtained from Ceylon whilst its ancient faith was still triumphant, and before the Brahministic kings had destroyed the greater part of the sacred books. Their two great metaphysical works are the Bee-da-gat-thoon-bon or Pitta-kata-yan and the Baideng. The former contains the three great divisions of the Buddhist scriptures, and is very voluminous. The Baideng is divided into four parts—one, however, of which has been lost. It is the great Pali work on mathematics and astrology. Of secular literature there are works on subjects such as chronological history, medicine, topography, ballads, and romances, the latter two of which are, to the credit of the Burmans, free from the grossness and indelicacy of similar productions in India.

Although the Burmans and Talings are of entirely different origin, and for hundreds of years were bitter enemies, still the lapse of time and identity of religion have caused their customs and manners to become almost one. The Arakanese differ, but very slightly.

A child is named on the 15th or 16th day after birth, the village elder selecting a fortunate day and hour. Names given in infancy can be changed at any time before puberty.

The next most important period in a boy's career is when he is made a shing, or probationer for monastic life.

For a girl the most important event after she has been named is the boring of her ears. This takes place when she is twelve or thirteen. A fortunate hour and day is fixed, and a feast prepared.

The important operation of tattooing is performed after the lad has left the monastery. Girls are never tattooed, except amongst the Khayeng. The whole person from the navel to the knee is covered with figures of animals, with tracery filling up the intervening spaces, so that the whole resembles a pan of dark blue breeches.

There are three ways in which, according to the laws of Menu, a man and woman can become husband and wife—first, when the parents give them to each other; second, when they come together by the instrumentality of a go-between; and third, when they come together by mutual consent. But, except in the case of a woman of mature age, both latter modes require the sanction of parents or guardians.

For seven days after marriage the couple are supposed not to speak to, notice, or even see, any one else.

Polygamy is recognised and permitted, but the right to have several wives is not much used in practice, the great majority having only one.

The forbidden degrees are few, being mother, daughter, sister, half-sister, aunt, grandmother, and granddaughter. The sovereign, however, marries his half-sister to ensure the purity of the royal blood.

The liberty of divorce is almost unrestricted, but the exercise of this right is much restrained by elaborate laws regarding the division of property.

Divorce

The Burmans sometimes inter their dead and sometimes burn them

Slavery still exists in Upper Burma, and in a very modified form in British territory. Here the slaves are descendants of those dedicated to a pagoda, and their duty is to keep the buildings, &c., clean. These people are more an outcast body than slaves, as they have no master and are perfectly free, except in so far as society is ruled by custom. Slaves, however, they are called by the Burmans, and are looked down upon as "unclean."

The principal amusements of the Burmans and Talaing are the *pwai* or theatrical representations, boat races, and buffalo fights (mainly amongst the Talaing and principally in Tenasserim), *lek-pwai* or boxing matches, cock-fighting, a sort of foot-ball, a miniature representation of nine pins, and gambling of all sorts.

The *pwai* are of two kinds—in one, men and women, in the other, dolls are worked by strings.

The boat races are usually held at the full moon in October, and are managed by a self-elected committee. Boat racing is one of their most manly and national sports, and no where are they seen at greater advantage than in their boats, in the management of which they show great skill. In rowing they almost always sing, keeping time with their oars. In racing they use paddles about four feet long, with which, in spurts, they attain great speed.

Most young men learn to box and wrestle, and a proficiency in them is always held in high esteem and respect. In boxing, "tipping up" and striking with the knee and foot, as well as the fist, are allowable. These are the most common divisions on holidays or festive occasions. No severe or cruel punishment is allowed, and the first drop of claret tapped, or blood drawn from a cut lip, decides the fight.

The *Kaings*, who inhabit the country about Doonreng in the Amherst district, are noted for their pugilistic powers, and numbers of the lads go to the annual festival at Tha-btoon to exercise them. A young woman from that part of the country rarely bestows her affections on one who has not shown prowess in a *lek-ywai*.

Buffalo fights are held at Amherst and Mergu, but are most common at Tavoy. They take place in an open plain. Each buffalo has a man on its back, and one on each side, who urge it to fight.

The two buffaloes are brought into the centre opposite each other, and butt and gore till one turns and runs away. It is a dangerous amusement to the riders and followers, and occasionally to the spectators. These fights cause much excitement in the district for some time before and after they occur.

The youths of Burma show great agility in their game of foot-ball, *khye-loon*. The ball is made of open wicker work, and is played by six or eight young men formed in a circle. It must not be struck with the hand, but foot, ankle, knee, &c.

The Burmese doctors are ignorant in the extreme, and are mere charlatans. If one doctor is unsuccessful, another is called in, and sometimes six or seven succeed each other, each giving his medicine. Finally a witch doctor is sent for.

Burmese doctors never use the knife, and amputation is never performed, except in Upper Burma, as a punishment.

The dress of Burmans and Talaing is very simple. The men wear a

Dress. cotton or silk kilt and plaid, both in one, knotted round the middle and hanging down to the knee, about six or eight yards long. The part not worn round the body is thrown over the shoulder like a plaid. They are generally checked or striped.

The dress of the women is also a piece of striped cotton or silk of a nearly square form, which is knotted round the middle and folded tightly over the bosom, it is open in front, so that in walking the legs and part of the thigh are exposed, over this is worn a white jacket open in front. Both men and women wear sandals.

The houses are usually marquee-shaped, and consist of one or more rooms, with the floor raised on posts seven or eight feet from the ground, and another in front much lower and forming a kind of verandah, sometimes open in front. The poorer classes use posts of common wood and make their walls of mats. The roof is sometimes composed of small flat tiles, sometimes split bamboos, sometimes coarse bamboo matting, but generally of thatch.

The furniture consists of mats and beds, with hard square pillows.

The food is simple, and cooking utensils and dishes few. There are ordinarily two meals a day, one at about eight in the morning, and the other at about five in the evening. The staple article of food is plain boiled rice. With it is taken a kind of soup or thin curry of vegetables, chillies, and onions, a pinch or two of fish paste, and fish or meat, if it can be afforded.

CHAPTER III

GEOGRAPHY AND TOPOGRAPHY

WHAT is generally known by the term Burma comprises two distinct regions,—British or Lower Burma, which is under British rule, and Upper Burma, under the dominion of a native sovereign.

British Burma embraces the three divisions of Arakan on the eastern shores of the Bay of Bengal—Pegu, bordering on the Gulf of Martaban, on the south, and the long and narrow strip of country styled Tenasserim, which extends to the isthmus of Kraw on the Malay peninsula.

Upper Burma may be divided conveniently, but not with any great precision, into three parts—1st, Northern Burma, including a variety of sparse and alien population, Singphos, Shans, and what not, under more or less imperfect subjection, 2nd, Burma Proper, inhabited by pure Burmans only, and 3rd, the Eastern Shan tributary States.*

Burma is bounded on the east by the empire of Siam and the Cambodia river to about $21^{\circ} 30'$ N long, and thence to its most northern extremity by the Chinese province of Yunan. Its northern boundary can hardly be defined. It apparently

* Yule's *Mission to Ava*.

runs up into an angle among the snowy ranges of eastern Tibet, thence it stretches westerly, bordering on Upper Assam, Manipur, the Lushai hills, and the Chittagong division of Bengal to the Naaf river, and west and south by the Bay of Bengal. The whole seaboard is exclusively British territory.

The division between the independent kingdom of Burma and the British territory is formed on the west by the great chain of mountains that runs down from Sylhet and Cachar in Lower Bengal to Cape Negrais.

A stone pillar on the Kyee-doung peak of this range, and thence an arbitrary line marked at certain distances by pillars and cairns, continues to define the northern boundary in a straight line to the range of mountains east of the Sittang river. There the independent State of Karennee intervenes, completing the boundary between Upper Burma and the British province.

The total area* of Burma is 285,664 square miles. Of this, 192,000 belong to Burma Proper and 93,664 to British Burma, in the following proportion — Arakan 18,530, Pegu 28,404, and Tenasserim 46,730. Thus British Burma is about 4,000 square miles larger than Great Britain.

Area

The whole region† of British Burma (and much of Burma Proper) is traversed by hill ranges having a general north and south direction parallel to the coast, and all the principal rivers‡ and streams have the same general course, which is the strike of the rocks. It is both naturally and geographically divided into four divisions—Arakan, the Irrawaddy valley, the Salween valley, and Tenasserim. Of these, the first three are formed by the Arakan, Pegu, and Taung-lung ranges, traversing the country north and south and forming the watershed of the Irrawaddy and Sittang rivers. The valleys of these two streams unite in their southern portions into an enormous littoral plain, stretching from near Cape Negrais along the whole coast to Martaban at the mouth of the Salween.

British Burma—Physical Geography

The Arakan division consists of more or less mountainous tracts, and lying between the hills and the sea is a narrow strip of country which is intersected by a labyrinth of tidal creeks of all sizes.

The two valleys of the Irrawaddy and the Sittang are similar in character, though the latter is the narrower. Both commence above the British boundary line, the noble and fertile Irrawaddy valley opening out widely as it trends southward, until at the extremity of the Pegu range it joins the Sittang valley, the two forming the great coast plain.

The Tenasserim division has more than half its area occupied by the ramifications of several mountain chains, which run up into peaks, some of them 3,000 to 6,000 feet high. The Tenasserim division touches the Shan States of Siam to about 16° 25' north lat., and thence runs down the northern part of the Malayan peninsula to the isthmus of Kra, being divided from Siam proper by the great mountain chain that cuts the peninsula longitudinally into two nearly equal halves.

The main hill ranges of British Burma are three in number. Commencing to the westward, the ridge running parallel with the coast and forming the watershed between the Bay of Bengal to the west and the Irrawaddy valley to the east is known as the

Mountains

* Forbes' *British Burma*

† Medlicott and Blanford

‡ Administration Report.

"Arakan Yoma,"—the word 'yoma' signifying 'backbone'*. The range is the southern continuation of the somewhat complicated ranges to the east of Chittagong. It becomes a well defined ridge of great breadth, but of comparatively moderate height, east of Akyab, and continues steadily to Cape Negrais. To the northward the general height of the watershed is about 3,000 or 4,000 feet, some peaks rising as much as 5,000, but to the southward the elevation is much less. This range is the boundary between Pegu and Arakan.

Arakan Yoma.

East of the Irrawaddy river and forming the water parting between that river and Sittang is another range known as the "Pegu Yoma," terminating to the southward close to Rangoon and extending northward for some distance beyond the British frontier. The maximum elevation of this yoma is about 2,000 feet, and is attained near the southern extremity in lat 17° 55' N., thence northward to the frontier the height varies from 500 to 1,200 feet. The whole of the mountains east of the Sittang must be classed with those of the Tenasserim province as parts of one great range, greatly exceeding the Arakan and Pegu Yoma in elevation, and distinguished from both by being mainly composed of metamorphic rocks.

Pegu Yoma

These are continued to the north as a distinct range—the Shan Yoma,—ultimately to join the Tibetan plateau. Its eastern watershed is drained by the Salween, and to the east of this again is a continuous lofty range of mountains called in the lower part the Karcnee Yoma. This forms a boundary between Burma and the more eastern States.

Shan Yoma

Towards the southern extremity of British Burma the various parallel ridges coalesce into one general range, which forms the backbone of the Malay peninsula. The metamorphic hills frequently attain an elevation of 5,000 to 6,000 feet, and some peaks are said to be as much as 7,000 feet above the sea.

Southern ranges

This is the chief river in Burma, the fourth river in the world in point of size, and the great highway into the dominions of the king of Burma. Its sources are still unexplored. D'Anville, in the middle of the 18th century, considered it as identical with the Sanpo, which flows through Thibet from west to east. In 1825 Klaproth adopted another idea, viz., that the Irrawaddy was a continuation of the Pinlaing-kiang, which after flowing through Western Yunnan entered the valley of the Irrawaddy at Bhamo. This idea has been proved to be erroneous. Lieutenant Wilcox was of opinion that its source is in the Kamyti country, 360 miles above Ava. But as the river at Bhamo, 250 miles above Ava, is a mile and a half wide and navigable for light steamers, it is highly improbable that its source should be only 110 miles beyond this point.

Rivers—Irrawaddy

Mr Gordon in his Report on the Irrawaddy River considers it much more likely that the water of the "Sanpo" river flows into the Irrawaddy than into the Brahmaputra*.

General Walker, in describing the survey operations in Assam during 1877-78, says "As regards the main question whether the 'Sanpo' river enters the Brahmaputra river or the Irrawaddy, the evidence is not yet conclusive.

Major-General Walker

The claims of the Irrawaddy to be the recipient of the Sanpo have recently been put forward with great skill by Mr Gordon. Mr Gordon's reasons are based

* Report on Irrawaddy River, 1879

mainly on the circumstance that the known volume of the great river at various points of its course, in Upper Burma particularly, is inconsistent with the sources of the river being so near at hand as in the hill ranges to the east of Assam, where they have been relegated ever since geographers arrived at the conclusion that the Sanpo was not the source of the Irrawaddy. Though in this the geographers are probably correct, they are as probably wrong in having placed the source of the Irrawaddy so low down. Lieutenant Harman has pointed out that there is ample area of *terra incognita* in the regions to the north-east and east of Lhasa to furnish a river for the Irrawaddy. And on Stanford's library map of Asia a large river, called the Sok to the north and the Gugbo lower down, and closely following the meridian of 96° , is shown as rising several hundred miles to the north of Assam, and eventually entering the Dibong branch of the Brahmaputra. This river may very possibly be the parent stream of the Irrawaddy, it certainly does not enter the Dibong, for Captain Woodthorpe's recent survey of the valley of that river shows conclusively that the sources are situated at a comparatively short distance beyond the Assam frontier.

Mr Gordon also publishes in his report, and in support of his theory, a detailed account of the last exploration of the Sanpo furnished by Major-General Walker, under date 7th November 1879, of which the following are extracts—"The course of the great Sanpo river has been explored by a new explorer, N-m-g, for a distance of about two hundred miles below the town of Cheting, the lowest point previously fixed."

The report goes to show that neither the Subansiri nor the Dibong, tributaries of the Brahmaputra is a continuation of the Sanpo as was supposed, but that they receive their drainage from a watershed of the rainiest region in the world south of the Sanpo, and of sufficient extent to fully account for their volume of water. "There can assuredly be no need for going into the interior of Thibet to look for new water-heds now that the explorer N-m-g has demonstrated that such a large extent of Himalayan slopes lies between the Sanpo and the Brahmaputra. It seems impossible any longer to doubt that the Sanpo and the Irrawaddy are the one river, and that the Brahmaputra, like the Ganges and the Indus, has been wrongly supposed by some geographers to break through the great Himalayan chain."

Captain Michell, who has given his particular attention to the question of whether the Brahmaputra or Irrawaddy is the continuation of the great river of Thibet, the Sanpo, has made some interesting notes on the subject. Having studied carefully all that former explorers have written on the subject, he compares their theories with the information he elicited from the Abors and tribes of the Upper Brahmaputra when he was amongst them last year. He has arrived at some entirely novel and startling conclusions, which, while they agree with native testimony, go far to rectify the hitherto antagonistic theories regarding the sources of the two great rivers of further India—the Brahmaputra and the Irrawaddy.

The following extracts from a paper written by Captain Michell on the subject are in his own words. "Wilcox says that a tradition prevails with the Abors of the Subansiri that their hunters, once travelling in quest of game, went much further towards the north than usual, and they arrived at the banks of a noble and rapid river, separating their wild hills from cultivated and spreading plains, whence the lowing of oxen was distinctly audible. Another singular account they mentioned of the Dibong Abors,—that the Dibong was an anastomosing branch of a river of great magnitude called the Sri Lohit, which also throws

off the Brahmaputra, and passes into unknown regions to the eastward. They (Abores) are supposed to see the Sri Lohit, and on the opposite bank numbers of people of a strange tribe are perceived coming down to the ghât to bathe, but it is too rapid and too broad to be crossed."

Captain Michell remarks on this "that the Miri of the Subansiri, if they travelled due north, would arrive on the banks of the Sanpo, and would see cultivated spreading plains." He adds "I have frequently heard from the natives the same story about the Dibong being an anastomosing branch of the great Sri Lohit. It should be particularly noted that many of the Miri boatmen call the Subansiri the Brahmaputra. So what Wilcox heard from them would favour the idea that the Subansiri was first thrown off, the overflow in the rains went to the Dibong, and the Sanpo continued to flow east. The Abores are very positive in their assertions that the Dibong is only a branch of a great river, and that only at certain seasons."

In 1825 Lieutenant Neufville of the Intelligence Department, on special duty in Assam, reported as follows to the Quarter Master General —

"The opening in the mountains through which the Dibong flows is sufficiently defined to authorise the opinion that this river communicates with the plains of the north, and the following well authenticated experiences prove that the Dibong has its sources above the mountain ranges. About 70 years ago, in the reign of Raja Joroon (i.e. 1750), a sudden and terrible flood poured from the Dibong, inundating the whole country and sweeping away large districts and villages in its resistless torrent. The general features of the country were changed, and the course of the great river was materially altered by it."

"The flood continued for fifteen days, during which various household utensils, elephant trappings, and numerous articles, belonging to a race evidently social and civilised, of pastoral and agricultural habits, were washed down the stream. This flood is established beyond doubt, and seems to prove the fact that the Dibong communicates either periodically, perennially, or occasionally with a considerable stream in the northern plains. The people Lieutenant Neufville examined all maintained that the river was called the Sri Lohit, and Lieutenant Neufville remarks that it must be a river of great importance, as he finds it mentioned at intervals by various tribes as far as the border of China or Chinese Tartary."

Lieutenant Neufville further states "The existence of a very large river called the Sri Lohit, and running at the back of the mountainous ranges, appears to be too generally asserted to be altogether void of foundation, but I am totally unable to ascertain the direction of its course, and can only reconcile the contradictory accounts by supposing it to separate into two distinct branches, taking opposite channels. One of these, flowing from east to west, is said to discharge its waters into the Dibong periodically with the rains, and the arguments in favour of this statement are supported by very strong data."

Lieutenant Neufville continues —

"The country to the eastward of Bhote is inhabited by a powerful nation called Kultas or Kultas, who have attained a high degree of civilisation. In former times communication was kept up between the Assamese and Kultas, but it has long since ceased. There is said to be an entrance to Assam from their country by a natural tunnel under the mountains. This is obviously fabulous, at least to the assumed extent."

"All accounts state that a body of Assamese under two sons of a Burra Gahain, about eight generations ago, took refuge in the country of the Kultas on the banks of the Sri Lohit, whence they maintained a communication with Assam for some time. To the Kultas are attributed the instruments of

husbandry and domestic life washed down in the great flood, but since that date all communication with them had ceased. To the eastward of the Kulita country is the well known country of the Lama, or the Taing Leng Raja, an independent chief frequently engaged in hostilities with the Kulitas.

"There is a passage to the Lama country through the Mishmi hills, a little to the north of the Brahmakund, twenty days' march."

Regarding the Singphoos, Lieutenant Neufville remarks "The Singphoos say that they were originally located on a hill called Mool Singara Bhoom, two months' journey from Assam, on the borders of China, and their borders were washed by a river called the Sri Lohit, which flowed in a southern direction and united with the Irrawaddy. They emigrated to the plains of Khoondoo-gong, also on the Sri Lohit.

Captain Michell remarks on this —

"Captain Neufville is known as having been a most painstaking and accurate investigator, and examined numbers of natives with reference to the flood, which was then of recent occurrence.

"I have heard exactly the same thing from the natives about the Assamese who took refuge on the banks of the Sri Lohit. Of one point there is no doubt, and that is, that the natives call the river we know as the Sanpo the Sri Lohit. They also call the river which flows through the ancient country of the Kamptis, near where we place the sources of the Irrawaddy, the Sri Lohit. They don't call the Dibong the Sri Lohit. In former times there was communication between the Assamese and Kulitas, but since the date of the great flood it had ceased."

It will be noticed that Captain Neufville arrived at the conclusion that the Sanpo had two branches taking opposite channels, one flowing east to west, which is said to discharge its waters into the Dibong periodically in the rains. The Kamptis agrees with the Singphoos that the Sri Lohit flows through the Lama valley from the north round one side of a great mountain in which the Brahmaputra has its rise. If we believe native evidence, we are forced to the conclusion that the Sanpo flows to the north of the Abors, and Mishmi through the Lama valley and into Burma, and in the rains throws a quantity of water into the Dibong.

"All explorers agree that about 40 miles from Chetang there is a rocky barrier opposing the onward progress of the Sanpo * * *". If we believe in Desgodieu's Lama (the only person who professes to have seen what actually occurs when the river encounters the barrier), we arrive at the conclusion that the Sanpo forces its way past the barrier, and there is an enormous waterfall. The river after the rocky barrier is passed is reported by the only person who professes to have seen it, a native explorer, to be in places very narrow, with a moderate current.

It appears an extraordinary circumstance that, though the river flows in a flat country and receives numerous large affluents, such as the Nam Pucha, 500 paces wide, the Kunjong, and numerous other large rivers, since passing the rocky barrier it steadily diminished in width from 400 yards to 150 yards, the current slow, and no extraordinary depth noted. Does not this point to the conclusion that some of the water had been diverted in the mountains?

"If we believe the natives, the Dibong only communicates with the Sanpo when the latter river overflows in the rains, and when not overflowed the Sri Lohit flows to the east, and passes down into the Kampti country and Burma, becoming the river which we recognise as the Irrawaddy."

Captain Michell thus concludes his remarks "A reference to my report on the Singphoo and Kampti country will show how very certain it is that a river called the Sri

Lohit enters Burma

Testimony of native tribes.

"Thus we see the Miris at the extreme north-west of Assam say they have a great river flowing to their north and in an east and west direction

Miris

Ahors

"The Ahors in the north say that that river is the Sri Lohit

"The Mishmis in the north-east say a great river flows to the north of their mountains in an easterly direction

Mishmis

Lamas

"The Kamptis in the south-east say the Sri Lohit flows by the capital of the Lama valley coming from the north

Kamptis

Singphoos

"The Singphoos on the south say that the Sri Lohit comes into their country from the north and

from an immense distance They, moreover, call the Irrawaddy the 'Sri Lohit'

"We have thus all the tribes from 92° to 98° and from 30° to 26° lat quite agreeing in the same story about the river This testimony has been obtained by different travellers not anxious to prove any particular geographical theory, and is therefore of considerably more value, as it is quite independent

"Our geographers cannot assert that the Simpo is not the Irrawaddy, on the other hand, all the native tribes through whose country it flows insist that it is The burden of proof lies with the geographers, who assert that the Irrawaddy and Simpo are not one and the same river"

It is surprising that modern writers, while discussing the various theories as to the sources of the Irrawaddy, should have entirely lost sight of Lieutenant Neufville's valuable report The most bitter opponent to the Simpo-Irrawaddy theory is Colonel Yule, but the arguments he brings forward in support of his theory do not convince, and after reading and weighing them the impression is left that the question has not been honestly gone into, and that the effort made is to support a tottering theory rather than to clear up a profound mystery and develop a great discovery The most satisfactory writer on this question is Mr Gordon, Engineer, Henzada He does not theorize, but takes all the evidences for and against, and after carefully sifting them lays his conclusions before the reader They were more convincing to me than any other arguments I had before read, and I am convinced that had Mr Gordon visited the north-east frontier and gathered information on the spot at which Captain Michell did, he would have arrived at the same conclusions

Having studied this question for some time, I quite agree with Captain Michell's deductions —

1st — That the Subansiri is a minor branch of the Sanpo

2nd — That the Sanpo when in flood overflows at the barrier mentioned and communicates with the Dibong

3rd — That the main stream of the Sanpo then flows north-east, and after some way throws a larger branch to join the Irrawaddy But it is also possible that the whole of the remaining flood does not go to the Irrawaddy, but that continuing its northerly course it may lose itself in the Salween, the Mekong, and the Yang-tse-kiang, and thus verify the report of an old writer that these five great rivers have one source in common

THE VALLEY OF THE IRRAWADDY

The drainage area of the Irrawaddy is, according to Mr Gordon,* shaped somewhat like an inverted sevens vase. The Valley of the Irrawaddy delta is the mouth. The true delta extends much higher than Saiktha, and has an area of about 18,000 square miles.

The neck of the vase extends from Prome, about 150 miles northwards, to Malloon. It is about 100 miles wide, and is occupied by spurs of hills from the Arakan and Pegu Yomas stretching down to the river.

The body of the vase may be said to occupy an oval or nearly circular area, the centre of which lies to the north of Mandalay. It extends from Malloon far north of Mandalay and Bhamo, but by a peculiar construction of the country and arrangement of the tributaries, the drainage from the greater part of this area only reaches the river south of Mandalay. All the principal tributaries of the lower part of the Irrawaddy valley enter the river within 40 miles of each other, the highest of them, the Myit-ngay, debouching 6 miles below Mandalay on the left bank, the others, the Moo and Chin-dwin, enter on the right bank. The exact boundaries and extent of the drainage basins of these rivers are not precisely known, but of the remaining area of the Burmese valley only 35,000 or 40,000 square miles drain into the river above Mandalay. The other 80,000 to 90,000 square miles are distributed between the three rivers,—the Chin-dwin, the Moo, and the Myit-ngay.

It is probable that over this part of the Irrawaddy valley on its right bank the annual rainfall is considerably less than 50 inches. It is known to be less over a large extent of territory on the eastern side, and at Mandalay itself the fall is much lower than at Thayetmyo or Prome. It is estimated at less than 10 inches south of Mandalay, and in the region of which the old city of Pagan is the centre, the

in is of a marvellous dryness. Some thousands of brick pagodas, several centuries old, are scattered over the site of the city in a state of perfect preservation. The contrast observed on going northwards from the delta to Upper Burma is here intensified, and the destructive effect of the luxuriant vegetation and disintegrating climate of the lower country is markedly absent. It is said occasional showers of rain fall, but this happens seldom, and it is estimated that the rainfall of a large portion of the country is less than 10 inches yearly. This climate seems to extend eastward as far as the foot of the Shan hills, and the natives report that the direct road from Yemaythun to Ava is so dry and badly supplied with water that elephants from the Nyin-gyan forest are brought to Ava by the road through the Shan States through the Natik pass.

The region to the north and east of Mandalay is believed to be better watered, but the rainfall cannot be heavy, as the Myit-ngay, which drains almost the whole of this country and a portion to the south, in all some 14,000 square miles, is only from 300 to 400 yards wide at its mouth. The Moo river is about 400 yards wide in flood in its lower part, and the Chin-dwin is probably 600 yards wide,—when visited by Dr Richardson,—near Grudot. The smaller streams to the south, from the mouth of the Chin-dwin to Magway, are small and unimportant, but are torrential in character, and precipitate large quantities of water suddenly into the Irrawaddy in a short time, but soon resume their normal state *

* *Report on the Irrawaddy River*, by R. Gordon, Part I

GEOLOGICAL FORMATION

The hills, which two or three miles below Thayetmyo approach the river

Hills at Thayetmyo and form steep ridges along its banks, are near the station, separated from it by a wide plain some miles in width. Winding round in a broken ridge to the west, they again form a higher, more marked, and broken range opposite to Meaday.

They are throughout composed of sandstones and shaly beds, of the same general character as those which form the ridges to the south of Thayetmyo. At Toung-
 Sandstones and shales. gyan-doung sharply marked ridges of sandstone stretch away from the river to the west. Some of these beds are calcareous, but

Toung gyan doung the majority are gritty sandstones, open grained, and but slightly indurated, with alternating beds of a more clayey deposit, generally of a bluish tint.

This ridge continues to hug the river bank till near Malloon, whence it recedes to the west, and a belt of champaign country intervenes between it and the river.

At Myin-hla the soil is flat and gravelly. Thus far the channel of the river is clear and well defined, and not very wide (1,200 to 1,400 yards), with frequently steep and wooded banks. After passing Mengoon the ground to east continues elevated, while to the west the river expands and assumes a lake-like character.

Some distance inland the elevated ground continues to extend as far as Mimboon, a little above and opposite Mag-way. From this a wide alluvial plain extends from ten to fifteen miles between the river and the outer spurs of the great Arakan mountains, and continues as far north as nearly opposite to Pagan, where another ridge approaches the river bank. Just above Myin-hla on the west bank a high cliff of soft reddish sandstone projects boldly into the river.

North of Mag-way for several miles are soft beds of sand and pebbly gravels, cut into deep ravines and watercourses. Along here fossilised wood occurs on the banks washed out of the sandy cliffs. This remarkably varying character of the bank is fully seen at the village of Maggee-bin. Here a good section is exposed, showing a succession of clayey sands, of sands, and pebbly sands. Fre-
 Maggee-bin quently intercalated masses of irregular shaped beds of a hard calcareous sandstone occur, and occasionally of a dense ferruginous conglomerate.

The great mass of the cliffs is a yellowish gray sand, or clayey sand, abounding in laminae of false bedding, and the result of irregular deposition. Between the villages of Kansheyat and Theclabay, the undulations of the surface are less sudden. This character continues past the village of Shadaing, and appears partly due to the presence of a thick bed of ferruginous sandstone under the clayey sands of the cliffs which has resisted the erosion. This is not the ferruginous pebbly conglomerate which appears to continue along here near to the base of the cliff, but a fine sandstone, with a few white quartz pebbles imbedded in a red cementing sand, upon it rests the ordinary yellowish blue clay.

This character partially continues to Sit-tha-bo-glay, but between the latter village and Yaynan-gyoung the cliffs are much intersected by small ravines and watercourses.

At Yaynan-gyoung along the river bank the lower portion of the cliff is composed of regularly laminated sands and clayey
 Yaynan gyoung sands. Many of the beds are slightly calcareous,

and abound in calcareo-concretionary masses of the most varied shapes and forms. The general bedding of the mass is quite regular, but each layer or bed abounds in oblique lamination, and often of a most complicated kind.

From Yaynan-gyoung to Menleng hill the formation is sandstone covered with ferruginous gravel.

The country is of the same general outline, formed of a plateau of tolerably level and flat country, intersected by numerous deep and irregular ravines. The whole has obviously been originally a great flat or elevated plateau, which has subsequently been eaten into and degraded by the action of surface water. And this has been the result of causes which have taken effect subsequently to the country having assumed its present general outline and configuration.

The top of Menleng hill is about 270 feet above the Irrawaddy at Yaynan-gyoung, the general level of the plateau from which it rises being about 160 feet.

The sandstone cliffs continue for about $2\frac{1}{4}$ miles above Yaynan-gyoung. Here is situated the large town of Peen-choung at the mouth of a stream which is said to have a considerable length of course.

Leaving this the aspect of the country changes very materially. We lose the steep bluffs of sandstone, and there is a great stretch of long-swelling country more richly cultivated and more covered with wood, though still not thickly. About a mile beyond this some low cliffs of loose sands and gravels (never more than forty feet high) are exposed. The layers are horizontal and very irregularly developed. A few small patches of ferruginous conglomeratic gravel occur. These are not ferruginous, and are but loosely coherent.

The same general character of country continues to beyond Silay-myo, with great flats of river alluvium here and there.

Passing Peema-choung, this plain country is replaced by a succession of ridgy hills of no great elevation, but forming a peculiar serrated outline, from the successive outcropping of the harder beds among the softer sands and clays. The beds dip to south and west at angles of 12° to 15° , and give a succession of long and sloping ridges with steep and sudden falls.

Above Singoo the country adjoining the river is low and flat, the country behind being formed of undulating plains, rising gradually as they recede from the river.

Pagan stands on a high bank or flat consisting of soft earthy sands and pebbly layers, occasionally cemented by lime, and thus forming concretionary masses. The pebbly layers are generally ferruginous and cemented by the peroxide of iron into hard conglomerates, which on the exposed face of the steep bank often stand out boldly from the general surface, the softer beds being washed away. The same character prevails for some miles along the river bank, from the bold and commanding point of Logahnundah upwards, past the old and present town of Pagan.

Opposite to Pagan on the west bank is the Tang-gyee range of hills.

These hills are composed of a series of shales of bluish-grey colour, with thin but tolerably regular beds of sandstone intercalated, above which comes a succession of thin-bedded sandstones, with their partings of shales or clays. This sandy character is persistent to the top and back towards the west. Near the summit there is a thick mass of sandstone 40 feet, which forms a marked scarp under the temple.

The continued succession and alteration of these harder and softer beds, together with the thinly covered and arid nature of their surface, owing

partly to the incessant falls of portions of the rocks, and partly to the sandy and unproductive nature of the soil, give a remarkable character to the landscape

North of Pagan low cliffs of sand and pebbly beds extend along the eastern bank, broken up by many small ravines

North of Pagan

and little creeks The sands and clays have been

very irregularly deposited, and occasionally form almost perpendicular banks 130 to 150 feet high

A short distance above Nyoung-oo the bank becomes low and wooded

Nyoung oo

Low banks of bluish clay (ten or twelve feet high)

are here and there exposed by the cutting back of

the river, but the whole country is low and like a great delta

This low wooded and delta-like character stretches to the north here for many miles past Koonee-ywa, Myin-gyan, and Yandaboo, and is the result of the great deposits formed by the junction of the Chin-dwin river with the Irrawaddy

Passing Samat-kyan, the channel of the river, still studded with islands, gradually becomes more defined Moun-gway is seen in the distance behind, and the villages of Saypa-dain, Nga-zoon, and Yajinna passed A long reach of river through finely timbered country, with gently undulating and cultivated hills behind, leads to Kyouk-ta-loung, where these hills come down to the river bank

They acquire the comparative importance which they possess only from

Kyouk ta loung

their contrast with the great extent of level ground

about, for nowhere do they rise more than 100 feet above the river level They form a series of flat-topped hillocks, with steep ravines between, composed of yellowish grey shaly clays, with yellow earthy sandstone, a few layers are hard and calcareous, but the majority are loosely coherent, and soft and earthy

The country behind formed on these rocks is a broken flat, the tops of the higher grounds being nearly level along the strike of the harder beds

The whole country seen from the higher grounds looks arid, parched, and barren The sandy, dry, and yellow soil peeps out all over, and is scarcely hidden by the stunted and half-grown brushwood and coppice, which is sparsely scattered over it

Advancing from Kyouk-ta-loung, the successive ranges of hills to the east of Mandalay rise into view

The Sagaing range of hills stretches for miles north and south, the south-

Sagaing range

erly termination of the ridge meeting the river

at the town of Sagaing

Exactly opposite to it is the rocky promontory of Shway-gyay-yet, and between these two points the channel of the Irrawaddy is narrowed to 800 yards, while both above and below these points the channel widens greatly, and is studded with sandbanks and islands

The average elevation is not more than 500 feet, with some points rising

Elevation

to 950 It is much broken up by small ravines

and watercourses, the surface is very bare, covered only with a few stunted coppice shrubs and a very scanty herbage

The rocks are gneissose and hornblendic, with a thick seam of limestone beds associated with them The lower beds are micaceous gneiss thinly foliated, and intercalated with other beds which are hornblendic These are also traversed by many veins of pure quartz Above these comes a series of beds of limestone, highly crystalline, and in parts beautifully white and saccharine marble.

From the marble beds along this ridge much fine stone could be had

Marble

This rock at Saguing is used largely for lime, the kilns being situated at the southern end of the range, and the supply of stone taken from the rugged scarp of the hill above

Running parallel with the main ridge of the Saguing hills there is a minor range, which extends in a perfectly continuous line for five or six miles nearly due north and south from the town. It rises gradually towards the north to about 250 feet in elevation, and then terminates somewhat abruptly

COURSE OF THE IRRAWADDY

The Irrawaddy after draining the great plain of Upper Burma enters, as it approaches the British frontier, a narrow valley lying between the spurs of the Aitahan and Pegu ranges and extending below the city of Prome. Thence it rolls on through the widening valley, until, about 90 miles from the sea, it bifurcates. One branch flows to the westward and forms the Bassein river, while the main channel in the lower part of the delta subdivides, and finally enters the sea by ten mouths. It is navigable for river steamers for 840 miles from the sea, and during the rainy season it rises 10 feet above its summer level. In some places it overflows the banks, and presents, as far as the eye can reach, a boundless expanse of turbid water. The current in the main channel is about 5 miles an hour. At Mandalay, where the river widens out, the rise during a flood does not quite correspond with that of Saguing, where it is narrow. But, according to measurements recorded, the ordinary high flood is 22 feet above the low water mark. In addition of one or two feet to this at Mandalay floods, it is said, the whole city. The river rises and subsides three or four times during the monsoon months, and has been known not to commence to fall at Bhamo till October. This is by the river 500 miles from the sea. The flood rise of the river at Bhamo is 60 feet, and the channel is at that time $1\frac{1}{2}$ miles wide, but is broken up into three channels by islands. The principal channel is the left, which is about seven hundred yards wide in December.

Defiles—There are three defiles* or "chouk-down" on the Irrawaddy

First defile

The first commences near Senbo, and extends for 25 miles to a few miles above Bhamo

Between these two points the river flows between high wooded banks. At the lower entrance the channel is one thousand yards broad, but gradually narrows to five hundred, two hundred, and even seventy yards, as the parallel ranges approach each other. The depth of this part of the river is very great, in some parts no bottom being found at 25 fathoms, but the navigation of the upper part is most dangerous, owing to numerous insulated greenstone rocks which stretch across it, exposed twenty feet and more in February. Dr. Anderson remarks "Telling evidences were not wanting in the high water mark twenty-five feet above the then level, and in the shivered trunks of large trees and the debris of branches heaped in wild confusion among the rocks, that the body of water pouring through the narrow gorge must in the rains be enormous and of terrific power. The navigation with the present obstacles unremoved would be impossible for river steamers, but engineering skill could speedily render the waterway practicable if desired, for traffic."*

The second defile commences a little below Kyoung-toung, and extends to

Second defile

within 3 miles of the island of Shway-baw. It is very deep, narrow, and overhung by gigantic precipices.

Their summits are mostly covered with scanty stunted trees, but

* Yule's *Mission to Ava*

some rise bare with splintery peaks and red rocky escarpments. The most striking feature is the great limestone precipice, which rises like a gigantic wall eight hundred feet from the water's edge. This is the Deva faced cliff celebrated in the mythical history of Sampenago.

The third defile commences at Malay and Sampenago, and extends for 80 miles to the town of Sengoo. The country on either bank is hilly and covered to the water's edge with luxuriant forest. The stream from 1,000 to 1,500 yards wide. Steamers drawing not more than 4 or 5 feet of water can at all times of the year navigate the river as far as Bhamo, and during the flood vessels of a much greater draught could pass. On its banks are many villages and cities, some of them very large. At Myin-gyan on the left bank gunpowder is manufactured. It is a large and wealthy place, and the chief town of a fertile district. Many large towns and villages are established a little back from the river, and the inhabitants thus avoid many exactions of boat service, both in peace and war.

In July 1871 Mr Strettel ascended the river as far as Munt-goung, lat 26° N. The year was remarkable for its dryness and the small amount of water in the river. He found it divided into two channels—that to the right about 50 yards wide, that to the left double that breadth, with 6 feet of water in the deepest part. The next day he ascended a "noble gorge," but the current was so strong that the men had to jump out and tow the boats. At Munt-goung the river divides into two great arms, that to the east being considerably the larger, but the rapid forbids further progress, though for boats of light draught the channel may be navigable for miles further north.

The total length of the Irrawaddy from the highest point yet reached (Manchee) to the sea is about 1,000 miles, but Manchee is on the western arm of the river, and the principal one is the eastern.

It is full of islands and sandbanks, many of the former, and all the latter, being submerged during the rains. New sandbanks are continually forming and old ones being removed, and the deep channel changes in many places every season, and in some places even oftener, but the course of the river, flowing as it does every where, except in the delta, between high banks, alters inappreciably. Its waters are extremely muddy, and mud is carried far out to sea.

It commences to rise in March, some months before the rains set in, but whether owing to the melting of the snows in the mountains in which it takes its rise, or to heavy rains at that season in the extreme northern portion of the country which it drains, or to both causes, is not yet known. Certain it is that as high as Bhamo it rises before any rain has fallen there. It rises and falls several

times till about June, and then rising pretty steadily it attains its maximum height about September, at which time it is at from 33 to 34 feet above its dry season level, and at this season below the latitude of Myan-goung inundates a vast tract of country to the east and unprotected bank. In the rains steamers and large boats enter the main river from Rangoon by the Pan-hlaing or Baw-lay creek, but during the dry season they have to descend the Rangoon river for some distance, and passing through the Bassein creek (not to be confounded with the Bassein river), enter the Irrawaddy by the To, or China Bakir. At this season the entrance of the Bassein river from the Irrawaddy is entirely closed.

by a large sandbank, but in the rains steamers can pass up and down by this channel. The tide is felt as far up as Henzada.

The principal affluents in British territory are the Ma-htoon (or Mungdoon), the Ma-da, and the Tha-lai-dan from the west, and the Kye-nee, the Bwot-lay, and the

Affluents.

Naweng from the east.

In Upper Burma the streams which feed the Irrawaddy are more considerable in size and number. To commence from the north, in lat 26° it receives a branch of size equal to its own from the eastward. In 24° 56' the Mo-goung river flows into it from the west.

The Mo-goung river is tortuous and subdivided, with occasional rapids, but boats of some considerable size ascend it, and several of its branches above Mo-goung are navigable by canals. One of its most considerable tributaries, the Endaw-choung, has its source in the Endawgyee—a lake among the hills to which the traditions of the people assign a volcanic origin.*

Mo-goung

The Taping river joins the Irrawaddy about a mile north of the town of Bhamo. During the dry season it is one hundred

Taping

and fifty to two hundred yards wide, and navigable only by boats, which convey a constant traffic between the Irrawaddy and Tsit-kaw, where the merchandise is transferred to and from mules. During the rains the Taping is at least 500 yards wide, and navigable for small river steamers up to this place, about 20 miles from its mouth. Its source is reported to be three days distant from Muangla, and flows through a deep gorge in the lofty mountains which lie north of Momiin. It receives in its course the water of a considerable number of mountain torrents, amongst others the Nanthabot, a moderate sized, deep flowing stream with a very strong current, which joins it at its exit from the hills. Regarding the name of this river, Mr Baber, in his Report of his Journey through Yunnan, remarks "This river (Taping) affords a very good instance of the confusion in which Chinese geographical names are often involved. Its correct name is 'Ta-ying,' but, according to the 'topography,' it is sometimes called 'Ta-chi.' At Kau-ngay (Mengla) it becomes the 'Au-lo.' Dr Anderson names it the 'Ta-pung,' but at Teng-yueh (Momiin) finds it called the 'Ta-hu' and 'Ta-lo.' The native maps provide it with still another designation, as the 'Yunbeng.' We have thus seven names appropriated by a single river scarcely 150 miles long."

A few miles below the 24th degree of latitude the Shway-li debouches into the Irrawaddy. It is a stream of considerable

Shway-li

length rising in Yunnan, where it is known as the "Lung-ch'uan," or more generally "Lung," by the Chinese.

"Here it is a clear stream, some fifty yards broad, running in a deep gully, and much obstructed by rapids. The valley is not

Near Tai p'ing pa.

flat, as is the case of the Salween, but easy slopes rise from both banks and exhibit a few patches of cultivation. A well preserved chain bridge, fifty-three yards long, spans the stream, the level of which we found to be 4,300 feet above the sea, 200 feet lower than the Mekong."

The Shway-li flows in a south-westerly direction as far as Muang-mow. It here flows almost east, but again bending to the south gradually, and again to the north-east, finally enters the Irrawaddy at a more northern latitude than Muang-mow. Between Muang-mow and the Irrawaddy the Shway-li is said to flow, a deep river 100 yards wide, through a cultivated plain studded with villages (Shan).

Dr Clement Williams says of it: "A few miles up from the mouth of the river I find at this season (April) an even current of water, of a depth varying from a few inches to over twelve feet, running between banks two or three hundred yards apart, with marks of rise of water in the flood of twenty feet or more above the present level. It is said to continue of this character for one day's journey, and then for five days to be a most intricate series of shallows, islands, channels, and sandbanks to where the Momeit river falls into it. One day leads to Momeit town, and at two or three days' boat journey from the junction the Kachin mountains are met with, and further progress stopped by the rocks of the ravines from which the river issues."

In the dry season boats drawing three feet can ascend to Momeit. In the summer floods the largest boats of 80 and 100 tons can go up for two or three days' journey beyond the junction of the Momeit stream. The river is so winding, however, that nine days' journey by the river can be accomplished in four by land, and, except for rafts of timber, bamboos, and pickled tea, and boats with heavy cargoes, the river is not much used, the land routes along its course being much more convenient for the lighter traffic. The lands near its banks are very low. They are flooded in the rains, and reported to be very unhealthy. The Kachins come down to within a few miles of its mouth, and make all the roads very unsafe.

At the lower end of the valley of Ava, and immediately under the walls of the city, comes in the fine stream of the Myit-ngay from the northern Shan country.

Myit-ngay

This river, about 150 yards broad, is a fine deep stream, and the banks very steep and high.*

According to Yule, this river is 300 yards in width, and was when crossed by him flowing with a deep, full, uniform, strong current. "It does not, according to the people, vary nearly so much as the Irrawaddy, and should, from what they said, be navigable for moderate sized boats throughout the year. It is stated to continue navigable for four days above Shway-yazan (probably about thirty miles), and then to become rapid and rocky. The name Myit-ngay, or little river, is evidently bestowed in distinction from the Irrawaddy only." The area drained by this river is 14,000 square miles.

In 21° 45' lat the Kyen-dwen (Chin-dwin) joins the Irrawaddy. Its extreme outlets are 22 miles apart, the interval forming a succession of long, low, and partially populated islands. The lowest and largest mouth of the Chin-dwin is traditionally said to have been an artificial cut made by one of the kings of Pagan. The river rises in the Shway-doung gree north of Mo-goung, and thence passes northwards, north-westwards, and westward through the plain of Payendwen, already a broad and navigable stream. After leaving the plain it curves round to the south, and keeps its southern course till terminating in the Irrawaddy.

Of the middle course of the Chin-dwin between the valley of the Amber mines in lat 26° 30', and the Burmese post of Kindat, little is known. The Burmans scarcely exercise any jurisdiction over the inhabitants, who are chiefly Shans, along the river, the Kachins and other wild tribes keeping to the hills. The navigation is interrupted at several places by falls or transverse reefs, a series of which is known to exist some sixteen miles below the plain of Hookong, and another which first bars the traffic upwards at Kakae, or Kat-tha, four days north of the head of the Kabo valley in lat. 24° 47' †. Not far below this last it receives the large tributary of the Coroo,

* Anderson.

† Crawford, 1836.

seek the sources of which, in a long narrow valley, are the Ya Hsue springs, which bring the Chinese trafficking to Mo-goung. The lower part of the Ooroo valley is said to be peopled and well cultivated. Salt is produced from brine springs in this valley, and timber is floated down for sale along the Chind-win. Below the Ooroo the narrow alluvial valley of the Chind-win is tolerably populated, and affords occasional rice grounds fertilised by annual inundation.

The Chind-win is navigable for the largest boats of the Irrawaddy up to Kendat, and the trade is very considerable in grain from the lower part of the river, as well as to some extent from the valley of the Ooroo. Most of the Chind-win's tributaries from the east are auriferous, and hence, perhaps, the name Sonaparanta applied anciently to the country between the two rivers and near their junction, not improbably the *Auria regio* of Ptolemy, almost a translation of the Sanskrit name.

The Moo bisects this Doab for a distance of two degrees from north to south, and enters the Irrawaddy among thick foliage and numerous villages a little below Kyoung-taloung.

The Yan falls into the Irrawaddy a little to the south of lat. 21° , but little is known of it. South of this no stream of consequence joins the Irrawaddy.

ITINERARY OF THE IRRAWADDY FROM THAYETMYO TO MANDALAY *

I left Thayetmyo on the 19th November 1881 at 6-30 A.M. the thermometer was 72° . At 8 we passed Allan-myo. This is a considerable village on the eastern bank of the river a little higher up than Thayetmyo. There is plenty of good camping ground here, and the ground rises inland from the river. Just behind the town and slightly to the south is a cluster of hillocks on which some temporary barracks have been erected. A detachment of troops was quartered here last year, but on the force at Thayet being reduced they were withdrawn. It is to be regretted that Thayetmyo was ever selected as a military post in preference to Allan-myo, as the latter is superior in every respect and in every way better suited for the purpose.

The country all about Allan-myo and south below Yua-toung has been carefully surveyed. It is proposed when the Irrawaddy Valley Railway is extended from Prome to Allan-myo to canton the troops on the eastern bank.

The idea at present is to have the railway terminus at Yua-toung exactly opposite to Thayetmyo and under the protection of the guns of the fort. The cantonment is to extend one mile north and south of Yua-toung and two miles inland. I consider the situation and proposed plan faulty, for reasons which are given in another place (see "Allan-myo," Part II).

A few miles further north the frontier is passed. This is here indicated by a masonry pillar on either bank. On the left bank there are two telegraph stations, one on each side of the frontier pillar,—one belonging to the Burmese, and the other to the British. At a short distance above this the east bank becomes level, but still covered with jungle. On the west bank the chain of hills which commenced below Thayetmyo still runs on about a mile distant from the river and 800 to 1,500 feet high. Many villages are passed on both banks, and nearly all the large ones are provided with pagodas and Kyoungs. Occasionally some patches of cultivation are seen, but only where the banks are very low, the river being so low itself.

The banks are generally from 30 to 60 feet high,—in most parts a firm clay, and those sloping gently to the water's edge are much cultivated, generally with tobacco.

Banks.

The land is only cultivated to a limited extent, and the mode of carrying out this cultivation in no respect differs from what

Cultivation.

Yule described it twenty-seven years ago. The same lazy happy-go-lucky Burman drives the same sleek well fed bullocks, who drag the same exaggerated rake on which the driver stands, and which scratches the surface just enough to loosen the clay sufficiently to conceal the seed, which having been sown, he rests in peace till the crop is ready to cut, then, if he can get no one to cut it for him, he takes it in himself. This species of cultivation, although very productive, is only carried on to a limited extent, apparently only to meet the wants of the cultivator. There seems to be a good deal of pasture land.

On the east bank are two conical hills crowned with pagodas and kyoungs

Sin bo-yay

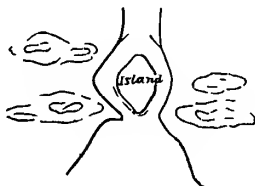
just below Sin-bo-yay. This is a new kutch station opened by the Bombay-Burma Trading Company.

We halt here for some time.

The bank here is firm gravel, with an easy slope. The country inland, as far as can be seen, appears covered with jungle.

Banks

Leaving Sin bo-yay, we pass some sandstone cliffs on the east bank. Between their base and the water is a considerable stretch of sand, their summit is wooded with sparse dried up low jungle, and the sides show many bare brown patches. On both sides of the river are good sized trees of dark foliage, close enough to give a grateful shade, but not so much so as to constitute jungle. The banks slope gently towards the water, and here show signs of considerable cultivation. The hills on the west are here about a mile from the bank and perhaps 1,500 feet high. Pass a large village on west bank. We now see on front No 1 Island as it is called by the ship captains. This is one of the positions on the river which could be made very strong.



There is a gentle rise on west bank covered with pagodas, to the west of it a village, and beyond that thick jungle, and to the rear a creek. In the middle of the river and north of this is an island shaped as shown in sketch with high steep sides that looked like an earthenwork. This place is commanded by hills to the south and west. It is so thickly covered with jungle that nothing can be seen on it. On the bank of the channel to the east is a long straggling village. Just at this point the channel runs close under the west bank—here high and rocky and covered with thick jungle. On the northern end of the island is a long sandbank. Near this a king's steamer is lying aground. She struck the bluff just mentioned, and her captain ran her aground to prevent her sinking. She is a fixture here till next year. These steamers of the king's have been sold him by some merchants. They do not steer well, and are generally not worth much when they become Burmese property. We now pass a village on the west

bank To the east a long strip of well-wooded country is visible, but at this distance it is difficult to say whether anything but trees grows on it. The country is certainly becoming much drier, and there are frequent patches of bare brown amongst the foliage, and the large trees stand out conspicuously dark. What jungle there is, is scrub.

About 1 o'clock we pass the village of Sin boo-eeu on the east bank. Sin boo-eeu Much paddy is cultivated about here, and the captain informs me that in 1877 he took Cultivation. 57 000 baskets of rice from hence to Mandalay. This equals 638 tons. Nothing is visible from the river of all this cultivation.

The bank has been increasing in height, and at this village is about 40 feet high. About a quarter of a mile further on a bluff rises 80 or 100 feet high. The west bank is low, considerably wooded with dark green trees.

At 1.45 we halt at Sin ba-sen for half an hour, to discharge cargo for a village lower down, which a newly formed sand-bank has rendered inaccessible. The river takes a bend to the east before reaching this village, and in the distance eastwards are some hills. Between them and the river is a wide alluvial flat, which on the river bank is covered with scrub jungle.

At 1.30 the east bank is formed of high sandstone cliffs about 100 feet high, broken into hillocks and ravines. The latter are well wooded, but the tops of the hillocks have but a scanty covering of trees and shrubs. Nothing here looks productive, and it is only in the ravines and small basins between the hills where verdure is seen. These occasional patches of green look very bright and green. The sandstone formation gives most picturesque banks, and the shape and height vary continually, sometimes sloping down to the water, at others abrupt and precipitous. There is generally a small portion of beach on which to land, firm and sandy, at the foot of the hillocks.

To the west a large sandbank intervenes between us and the island, and a low flat alluvial plain covered with jungle stretches to the Arakan mountains now many miles distant.

A little further on the rocks on the east bank rise nearly directly from the water to a height of 100 feet, in most parts bare, but in some wooded. The river now runs north, and the channel we use is over half a mile wide. The eastern bank gets lower now, and is much drier. We pass a village in two clusters of huts to the east at 2.10. The bank is now about 30 feet high, and some hundred yards behind a hill rises about 100 feet, well wooded.

At 2.15 pass the mouth of a small creek. A bright green jungle of verdure clothes its banks.

On the west bank is a long straggling village, at the south end of which is a tope of trees, in which appear several clusters of houses intermixed with plantain and palmyra trees. To the north of all is a lot of pagodas. The banks, 40 or 50 feet high and sloping to the water, are mostly cultivated. This is the village of Minay. Opposite to this on the east bank is the village of Kho-doung gway. It is large and prosperous, and on the river bank are a dozen or so boats of sizes

At 2-37 reach No 2 Island This is 3 or 4 miles above the north end of the island described as No 1, and is called by the Flotilla

No 2 Island.

people No 2 Island It is commanded by heights on the east bank less than a mile distant In shape

Young-dwen-choon dau. this is much like No 1, but not so regular The west bank is densely wooded and rather low I could see no sign of any earthworks, the grass and jungle was so close Yet it was this island which the Burmans fortified in 1879-80, when war was believed to be imminent with the British The work was discontinued, as the Burmans suddenly recollected that in the floods the eastern passage would fill and the island would be surrounded with water It is the invariable custom of the Burman soldier to keep his line of retreat clear and open, and if that is in the least threatened, he will not stand a moment, and so the work was abandoned The channel on east is very narrow and quite shallow

In the centre of the island is a raised piece of ground, which is crowned by a ruined pagoda this mound is higher than the western bank On the north end the ground is still higher, and there is a cluster of pagodas on it

Nearly opposite the north end of the island and on the west bank is the

Mee-choung yay west.

village of Mee choung-yay, backed with bright green foliage, and behind this on a hill 200 feet

high and precipitous to the river, are two pagodas This hill commands the island, and appears more accessible than the hills to the east There is no part of this island which is not easily accessible from the river The north end is much the highest, and though well wooded is not obstructed by jungle Calculating the length of the island by time, I make it five or six miles

To occupy the position effectually, it would be necessary to occupy the high ground on both flanks, as well as the island, and by obstructing one passage, to force an enemy into the other This second channel could then be obstructed about half-way at some point where a heavy concentrated fire could be brought to bear on the advancing enemy But this cannot be done without guns, and for all practical purposes they are wanting Supposing the position to be armed, it could easily be turned from the land side

A low range of hills continues along the east bank a few hundred yards distant, the hills on west have disappeared All that can now be seen is a flat wooded country

Our course lies near the middle of the river, which is here a fine expanse of water nearly a mile wide It takes a turn here to the west, which it keeps until past Patanagó

The east bank is covered with fine large trees, and palmyra grows, which shelter the village of Nga-yay There is no sign of cultivation We pass several small watercourses.

Nga yay

The west bank now commands the east, and the scenery is very pretty

Bank

Now we come to a sheer precipice over 100 feet high, which continues along the bank a short distance at a lower height, still sloping upwards inland When near the water it generally slopes gradually, but at times descends abruptly into it The east bank is about 30 or 40 feet above the water

At 4-35 our course is west-north west, and we make straight for Patanagó, which appears a couple of miles off, its pagodas shining out of the trees One group is on an elevation 200 or 300 feet high, and to the right of these others lower down it looks quite a city of pagodas

At 4-40 we pass an abrupt cliff to west, which looks like an old quarry The country to west is very rough, hilly, and jungly On the east are occasional traces

of cultivation. And although the height of the banks and the jungle growth immediately on the top prevent one seeing what is behind, the palm groves, which occasionally appear, are a sure indication of the vicinity of some village.

At 4-50 pass Patanagó, from whence our course lies N 20 E

To the west and nearly 2 miles off Myin hla appears. We can see the pagodas and kyonnags, although the town itself is on the other side of the elbow of the river which here juts into the river.

Right ahead is a high ground, which seems to block the river to the north. On this is situated the fort of Koo-geey-gyoung or Koolee gone. The hill is two or three hundred feet high, and the fort commands this reach of the river completely. It is about 2 miles long, and our guns would knock the place to pieces long before the Burmese guns (if they had any) could touch us.

There are no embrasures for guns, nor platforms nor carriages. Nor are there any guns. I noticed two small black things on the ramparts that might have been jingals. There are paths leading from the place to the river and over the ramparts. East of the fort are the soldiers' huts.

There are said to be 700 soldiers here under an Italian, who drills them. There is a small detachment of artillery, who live in the fort, into which none of the other soldiers are permitted to go.

The arms consist of 400 muskets of sorts and 10 jingals. There were said to be about 200 men at Myin hla, who were a sort of body guard to the Woon, and 1,000 at Sit-oung-zan, a fort 2 miles east of Meen-goon.

The east bank from Patanagó to Koolee gone is formed of small hills. A road leads along them by which the fort can be reached by a force landing at Patanagó out of reach of its guns. A landing could be effected easily at any spot. (This place is fully described under the head of "Forts")

At 5-30 P.M. arrive and anchor at Myin hla. This is the frontier custom-house station, and the officers here examine all vessels going up and coming down. They appear to act entirely on their own authority, and give great trouble to passengers. At this time in particular when the party inimical to the British is in power, they delight in affronting British subjects.

Myin hla is on the right bank of the river opposite to Koolee-gone. The bank is 40 feet above the water. There is only a small town on the water's edge, the principal one being on higher land, and some distance from the river bank. The country for some distance inland is covered with water during the rains.

A redoubt was built here, but never seems to have been used. At present the north west corner has a large piece carried away by the floods, and each successive year will carry away more. It is situated at the north end of the town and close to the river bank. I was surprised when lying at Myin hla that I did not see the redoubt, but on inquiry I discovered the walled enclosure, which looked more like a roofless house than anything else, was the famed redoubt. It is now entirely disused, and there are no soldiers in it, nor any attempt made to keep it in repair (see photograph of Myin-hla). From Myin-hla you get a fine view of the fort of Koolee-gone. A spur stretches down towards Myin-hla, gradually sloping to the water. Up this is a path to the fort. This path goes right over the ramparts, and is apparently the usual way of entering the fort from this side. The spur mentioned is quite bare of trees and open grass, so that an advance from this side would be very exposed. The west side, however, is well covered with bushes, and although steep, a few

sharpshooters would clear the place of all hostile marksmen. The hillocks that run along the bank as far as Patanagó are covered with low brushwood.

Particulars as to the future disposal of this fort are given under the head of "Forts."

We took nearly 12 hours over this march, deducting two hours for stoppages. This might be decreased to 8, and a steamer leaving Thayetnivo at 5.30 o'clock A.M. would arrive at Myin-hla at 1.30 or 2. Say they reached Patanagó at 1.30, the whole afternoon would remain to march to Kooké gone and take it—no difficult task. The gunboat would proceed in advance and having anchored in some handy place would shell the fort, if any opposition were offered, which I do not for a moment believe would be the case.

We leave Myin-hla at 9 A.M., and steaming north pass close under the fort. It is difficult to conceive how any European engineer should build such a thing for defensive purposes. If guns were mounted on it, it would be quite impossible for them to fire at any vessel ascending the river without depressing the guns to an angle of 17° or 18°.

At 3 miles distance the west bank is about 100 feet high and covered with jungle. For a short way there are low hills, but they shortly after sink

Banks into the plain, and the banks decrease in height and show a jungly stretch of country inland, broken with occasional hillocks. A little further on we pass a hill on the west bank covered with pagodas. To the east the elevated bank ceases and a sandbank stretches out about 4 miles. The water

Country to west here is about a mile wide. On the west bank there are fewer trees, and it appears to be cultivated with paddy. Far inland may be seen many clusters of pagodas and kyongs rising from luxuriant groves of tamarind and palmyra trees. These are widely scattered over the country, and indicate the presence of many towns and villages.

Banks The banks are sometimes steep and clayey, but generally firm and easy to land on.

Meen goon or Myin goon myo. At 7 miles from Myin-hla pass Meen goon on east bank. It is the head quarters of the Myin-goon district, and a Woon resides here.

Camping ground There is good camping ground about a mile south of the town, where there is a collection of kyongs.

Roads There is a road from this place south to Koolé-gone, east to Young-dwen, and north-east to Mag-way.

There is a large sandbank to the east, ahead the river bends, and 5 or 6 miles off the hilly banks seem to rise from the water. To the west the land is low and cultivated, and there are many village groves. During the rains a large tract of country must be under water, and the river would then flow with a width of 6 or 8 miles.

At 12-10 pass high land rising from east bank 150 to 200 feet and fairly wooded. The west bank is low and grassy, and it

Banks. is difficult to say whether it is the proper bank or an island, for when the river is low the islands have villages on them, as well as the banks. The east bank still continues high and broken, with ravines, in some parts steep, and in others sloping and covered with patches of stunted jungle. A chain of hills now rises from the low lying western bank and continues for a short

distance when it again subsides and is succeeded by a low wooded tract of country To the east an extensive sandbank stretches some distance Inland to this side is a good deal of cultivation, and large groves of palm trees These shelter some villages which lie about 4 miles south of Mag-way

At 1 o'clock we arrive off the end of an island to the west, which we have been running along for more than three hours There are so many islands and sandbanks that it is impossible to say exactly where the western bank may lie The line of hills to west is now near, and they appear covered with jungle The water here is nearly a mile wide, the channel lying near the eastern bank

We halt at a village called Obho, a couple of miles below Mag-way The steamers are now obliged to stop at this place, as the formation of sandbanks prevents their approaching Mag way This is but a small village The Bombay, Burma Trading Company have a kutch factory here and also a salt godown

The bank is firm and pebbly, and the shore all along is gravel and sand on a foundation of stone, and landing can be effected in any place There is an enclosure of kyongs and pagodas on the bank about 150 yards square, and another to east a little smaller These would make good camping ground for a small force Beyond the village there is plenty of ground suitable for camping in dry weather

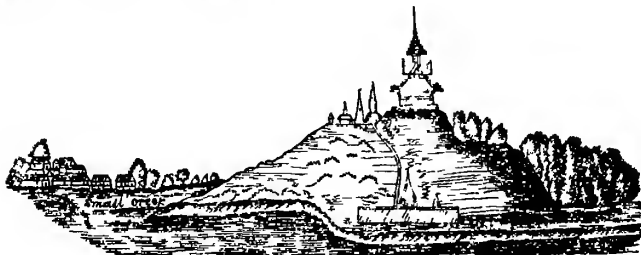
We leave Obho at 6-30 A.M. After steaming 3 miles, the western bank rises out of the water to a considerable height and is covered with pagodas It slopes on the northern side to the river bank, which is low, and inclines gently to the water's edge

Third day 21st November
1881 - from Obho to Sin by ocean
Start 5.30 A.M. arrive 3.45 P.M.

On the east bank is a large pagoda with a gilded spire It is built on a large platform on the top of a hill, and is called Mya-thalwon or Za-loon This platform is in shape like a pyramid and quite white, and the mass of gilded domes placed on it and backed with bright and vivid green has a striking and magnificent appearance

The hills to the west terminate in the village mentioned above, and are succeeded by a low flat, which is lost in jungle covered distance

North of this is Membo, on the same bank (west)—a succession of pagodas and villages that extend for a couple of miles



To the east is a hill, and south of it a break, through which the country behind can be seen, though indistinctly. It appears well wooded with large trees, which stand up conspicuously. The high ground in part lines the east bank, and a little further north seems to rise straight from the water 150 to 200 feet high. It is well wooded, and pagodas, kyoungs, and villages are dotted over it and interspersed among the umbrageous tamarind and the graceful palm, which appear in clusters and mark the spot where some unseen village seeks shelter from the burning rays of the Burmese sun. Westward the country is a dead flat as far as the distant Arakan hills. This is all alluvial plain.

Our course now takes us to the eastern bank and close to the hill mentioned above. It is well wooded, and the spaces between the trees are covered with pasture. The cliff rises from the water and is of yellow sandstone. The eastern bank is now very rough and broken, high, rugged and wooded. The flat top looks smooth and grassy.

At 7-45 we pass the dry bed of a stream to east—broad, shallow, and sandy. A break in the high land of this bank makes a valley half a mile wide, which runs inland for a considerable distance, perhaps 3 to 5 miles. In

Kayn or Wetmasoot this is situated the village of Kayin or Wetmasoot—I am not certain which, as I was told one name when going up the river and another when returning. It is in a grove of palm trees, and around the country is cultivated.

On the west bank nearly opposite to this is the island of Sin-bo zait.

The river is now full of islands, and the channel is never fixed. To-day it is in one place, and a rise of the river in a couple of months may alter its course to the other bank.

The eastern bank is now level and open, as far as the eye can reach. It slopes up from the river bank with a gentle inclination for 6 or 8 miles inland, as far as I can guess—it may be more. It is wooded and in places roughened with hillocks, and shows no sign of cultivation and few of inhabitants. The captain tells me that all the natives agree in asserting that the country to the east of this is fertile.

At 8-50 we pass straggling groups of houses nearly two miles along west bank. This is the village of Minjoo.

Pass the following villages —

West bank Saybo—small
Kway-day wah

On the eastern bank are many pagodas scattered about, and a few small hamlets, but no villages of any size. At 9-45 about six miles above Minjoo we pass a large village on the west bank, and right ahead on the same bank is another village and pagoda. A little further on is

Moh creek the Moh creek

The mountain of Puppa Doung is now seen bearing N E. This mountain is 3,000 feet above sea level and from this spot distant about 35 miles. It is visible a long way above Myin-gyan and would make a splendid signal station, for in this part there is little rain. There is, however, an objection to it as a signal station, and that is that there are generally clouds floating about the summit, and you could never be sure at what moment these might not come down.

We ran aground off Yaynan-gyoung, and I took the opportunity to photograph the place.

Before this, we passed the village of Nyoung-hla, which means "beautiful banyan tree". This is situated in a break in the high sandstone banks which run to the north and south.

Yaynan-gyoung is in a desolate valley. The sandstone banks of the river are from 80 to 100 feet high north and south. A group of pagodas occupies the centre of the position, all beside looks bleak and barren.

This is a town of considerable size, the prominent feature being the cluster of pagodas just mentioned on a knoll in the foreground. We did not halt here, so it was impossible to examine it closely. A few miles from this are the famous earth oil wells.

The river is now full of islands, and must measure between its proper banks fully 4 miles. There are many villages to west, and the country stretches out flat and fertile to the western hills, which are seen in the far distance.

The eastern bank is still of barren aspect, and the same hillocky range with sparse scrubby jungle continues. We pass a village in a grove of tamarind trees to east. Two miles further on another break is filled by an extensive grove of palmyra trees, in which lies the village of Kyouk-yay. Behind the village is a cluster of pagodas, the spire of one being gilded. Beyond, the country is as before, sloping up from the river and visible for ten or twelve miles, it looks drier, and bare patches are more frequent.

Six miles above Yaynan-gyoung is Pin-yoowa on the east bank, which is high sandstone, dry and barren. We now pass between two large islands.

A couple of miles further on is the village of Kyouk-yay. The steamers sometimes stop here for cargo. It has about 400 houses, and is situated on a low piece of ground in a break of the high banks. There are palmyra trees north and south, and cultivation to south. Five hundred yards north of village is a piece of high-land level ground 200 x 100 yards. The plateau extends to east for 200 yards or so. This is a burning and burial place. It is bounded on the north by a deep ravine or dry river bed, beyond which is another plateau.

The telegraph line runs to the east. The country to east is rough and broken and covered with thin scrub jungle. A road leads along bank about 100 yards from the river.

The main part of the village lies directly in front of the anchorage, and a couple of hundred yards from the bank is a group of pagodas, zayats, and kyoungs situated on some ground a good deal higher than the rest of the village. This is always the case with kyoungs and pagodas, which invariably occupy the best ground available in the neighbourhood.

The pagodas and kyoungs would afford shelter to a couple of hundred men. Beyond them to the east the ground is open, rough and high, to the south is low and under paddy cultivation.

Kyouk-yeh is divided into two parts by the bed of a stream, dry at this season, but which a little rain would doubtless turn into a torrent. The ground to the south is cultivated with paddy and looks bright and green. The sandstone cliffs to the north are about 100 feet above the water. The pagoda enclosures are walled round, and could be easily converted into a defensive post, and the piece of elevated ground to east could also be included. This would make a capital station on the river. This appears a prosperous place. There were about 27 large boats along

the bank The dry sandy beds of many watercourses are seen to east. These are shallow, wide and sandy, and at present quite dry, but a good rainfall converts them into raging torrents that sweep away all before them

A few miles north of Kyouk-yeh we pass the village of Toung-baloo

Toung-baloo

It is situated on the east bank on a high plateau 400 yards long and 60 feet high To the south is the dry bed of a river, beyond which is a clump of palmyras and some pagodas Further on, the ground again slopes upwards



This high ground though a good deal cut up by ravines, stretches inland for a considerable distance, increasing in height It is a sandstone formation and rather barren, sparsely covered with scrub jungle

The village of Meh-wah is passed before reaching this At 3 35 we pass a small village to the east, with the usual supply of boats and a little cultivation Far away in the west is seen a large tope of trees, which doubtless shelters some town of importance Further on and on the west bank, we now see the town of Salen myo It is in a large tope of dark green trees, from which the sharp points of the pagodas taper gracefully The trees are clustered like those of an English park, and between, the verdure is fresh and bright There are a number of boats at Salen A mile ahead is a bluff, and beyond it a dark tope of trees, with a lot of pagodas

The village at which we stop is a small place about two miles from

Sen byoo gyoon

Sen byoo gyoon, called, I think, Koon ywa The river on which Sen byoo gyoon is situated is not at present navigable The country here and for a long distance inland is very fertile, and all about Salen and from it away west to the Arakan hills is said to be cultivated and rich We anchor at 3 45 P.M. The bank is clay and about 40 feet high It is flooded every year, as is the country inland on this bank, for a considerable distance The road from the Irrawaddy to Arakan and the An pass terminates on this side at Sen-byoo gyoon This town is said to contain about 1,000 inhabitants

The chief articles cultivated are wheat, paddy, maize, beans, and gram

Leaving Sen byoo-gyoon, the river is full of islands, through the midst of which our course lies A few miles later we pass the village of Kya bin to west Here a cluster of pagodas appear rising from a grove of tamarrind trees Behind this the ground rises at a

Fourth day—Sen byoo-gyoon to Nyaung-goo

Departure 5 30 arrival 4-45

Kya-bin.

gentle slope towards the north like a bank and then loses itself in the plain, its highest point being about 500 feet Just behind these pagodas and bearing 250° is a lofty peak of the Arakan Yoma, and a still higher mass bears due north. At this part the river after bending five miles in a north-westerly

direction continues north for nearly ten, and then turns almost due east beyond Silay myo

At 7 A.M., the west bank is low and flat, to east a large island intervenes between us and the shore, and to north east the distant horizon for about twenty degrees is only broken by a few speck-like trees. Bearing due east is Pappa Doung, topped with clouds. The country on the east bank is well wooded for some miles inland, but beyond this it now for the first time appears treeless and in long unbroken swells. The western bank is still very indistinct, but seems fairly cultivated, and, judging from the number of clumps of village trees, seems fairly populated.

Since leaving Sen byoo-gyoon, we have passed on the east bank the villages of—

Nyoung gyounng east.

Win yaba, east

Salindoung east

7-20 —Although we are about 6 miles below Pakan ngay, we can see its pagodas on the east bank ahead

Some of the islands now passed are well cultivated, and others have pasture land. The river here is over a mile wide and shallow. We have had some trouble this morning, but our captain seems an expert navigator, and so we have been saved from grounding.

To the west the line of the river bank is not visible, being shut out by islands and sandbanks. The country at present visible on that side is low, flat and cultivated.

Five or six miles inland is a large village, with many pagodas and kyoungs, and the surrounding cultivation indicates its prosperity. Not far from it is a small range of

Zee byoo-bun

hills

Our course now lies between the islands in a channel half a mile wide. We shortly approach the east bank, and see ahead the pagodas and kyoungs of Silay-myo.

Silay myo is a town on the east bank. It is the head quarters of a woon

Silay myo

There is nothing striking in the town, as will be seen from the photo, it is only the ordinary mat-

and bamboo arrangement

North of the town is a sandstone rock about a mile long, irregular in shape, and varying in width from 200 yards to 600

Silay rock

The sides are for the greater part steep and abrupt, but occasional breaks admit of easy access. It is situated on an elbow of the river, which flows on the west and northern sides. It commands all the ground in the vicinity, and would be an excellent position to secure on the river. A very trifling expenditure of labour would suffice to make the western portion of this very strong, and all along the high ground on the north bank would make excellent camping ground for troops. There is plenty of water here all the year round for steamers to approach and lie close under the bank. The top of the rock is quite flat and grassy—no jungle. There are a few small pagodas, there are no trees on top. Occasional ravines lead more or less steeply to the river on one side and the country on the other. To the east the country is open and undulating—in parts cultivated, and in others

pasture land To the south are a lot of pagodas in a walled enclosure. About 200 x 200 yards east of these and on higher ground are others, not enclosed I consider this one of the best places on the river to establish a post at, if we were advancing on Mandalay The top of the rock must be quite a hundred feet from the river at low water

We left Silay at 11 o'clock—rate about 6 miles per hour After proceeding about 3 miles, a hill appears a mile inland on the east bank, about 500 feet high and a mile long This has a pagoda on top The western bank continues low and flat to the base of the small range of hills before mentioned There are large palmyra plantations and many villages, but I cannot ascertain their names, as the captains of this company know nothing about any villages or towns except those at which they stop

Naw-choung and Zee-byoo-bin, east.

We pass the villages of Naw-choung and Zee-byoo-bin to east

The eastern bank continues hilly, and at about 100 feet high we pass Pyin wa and Nyoung byoo-bin, east.

At 11-40 we came abreast of a group of pagodas them in a wide extending palmyra tope is the village of Seik phyoo The pagodas are dotted all along the spur which ends the hills on that side, the extreme point is topped with one The land between these hills and the river is to a great extent cultivated On the east bank is a small hamlet, and behind the

Seik phyoo.
side, the extreme point

Banks
land undulates gently up from the river The crests of these undulations look dry, and but few trees are seen on them, and those stunted The valleys or bottoms are green and cultivated The west bank is now hillocky, of sandstone, and sparsely covered with stunted trees

To the north of Seik-phyoo is a river—the Yaw The mouth is about 100 yards wide, and teak is floated down during the rains

The eastern bank continues undulating up from the bank, but appears still drier, and has little on it but brownish pasture and a few trees Here and there a valley runs inland, where there is a break, and this is always cultivated, and has generally a little village, while the trees are in clusters, and the intervals between them of pasture land reminds one of a park in England The undulations sometimes rise into small hills of 500 feet high Just below Singoo the hills on both banks are scarcely a mile apart A little north of this the eastern bank subsides, and the dry bed of a stream comes down to the river A tongue of land runs up between this bed and a stream to the north On the point of this is a walled pagoda. There are many boats of sizes lying along the

Singoo-myo.
bank here, and a few hundred yards up this stream is seen the town of Singoo-myo To the south of the town appears the best place for camping

There are many pagodas here, and the land far up the slopes, which run inland for 10 miles in sight, are cultivated This Country inland east.
cultivation is not continuous, for between the trees are belts and clumps of trees here and there, which give it a park-like aspect. At a distance these trees are all drawn together, which gives the country the appearance of being covered with forest. On examining it closely with powerful field glasses, it is seen that, as far as the eye can reach, the wooding of the

country is just as above described, and the cultivation appears greater the more closely it is examined. A little north of this on the western bank is a low range of hills. They are rugged and barren, and are thinly scattered over with stunted ill-conditioned trees.

On the east bank a point juts out into the water, with many pagodas. Me-loung-hyah; Kyabo on it and a little hamlet below, called Me-loung-Shway-gyoung-bun. byah. A little further north on the same bank is Kyabo, beyond it Shway-gyoung bin.

Our course lies outside a large island, and is on the east side now. On the east bank is a large grove of palmyra, some pagodas, and a village. At 1-20 Pagan appears about 4 miles due north from this spot, but the water is so bad that we have to go over about 8 before we reach it.

The hills to the left show curious lines of strata, the formation seems sandstone. The distance between the river banks now is nearly four miles. At 2-4 we are nearly abreast of Pagan myo. On the west the hills are close to the bank and run up to about 1,500 feet. Our course lies close under this bank. On these hills are some large trees covered with orange and yellow flowers.

The banks are for the most part firm and pebbly, and in all places easy to land on, except where the hills run into the water.

The hills are barren and rugged, and produce nothing but the tree mentioned and the *euphorbia*.

There is an extensive sandbank between us and Pagan. Some villages are passed on the west bank, but they are few. I could not find out the names, but on Wood's map the following villages are shown on the western bank —

Dang-gyee pay
Toung moung
Nyoung hla
Myeeet-chee

West of Pagan
North of Pagan
North of Pagan
North of Pagan.

When abreast of Myeeet chee our course changes to north-east, and a splendid view of the ancient city of Pagan lies before us. I have given a full account of this place under its name, and shall here only make a few remarks about it.

The whole country here is intensely dry. The rainfall is said not to exceed 10 inches yearly. There are consequently very few trees, and what there are, close to the river. I was not able to land, so had to make my notes from the steamer on the journey up and down.

There is only one part of Pagan which the water touches, and that is a small part of the north and north-west side. It is situated on an elbow of the Irrawaddy, which here turns to east of north-east. The bank of the river is covered with ruins for nearly 8 miles.

The corner of the city at the elbow of the river appears to me the most suitable place for a station, but I cannot speak definitely, as I have never yet been ashore there. It is, however, the only place that can be approached in the dry weather, and there are some trees about.

The banks are high here, and there are many large pagodas. About five hundred yards from the point is a large white pagoda. This, I think, is Ananda.

The steamer channel runs within 300 yards of the shore, which is firm and sloping, and in parts rocky—flat slabs of rock. Near the point are many huts and pagodas. A road runs inland 400 yards north of the point. This is the road to Ava and Mandalay. The country south of the point is covered with low brushwood.

At 4-45 P.M. arrive at Nyonng-oo. This is the harbour of Pagan, and is about 2 miles north of it. The country is rough and ravined. Immediately inland from the bank where we lie are a number of hillocks. These have been raised for the most part artificially, and have been originally the sites of many pagodas, whose crumbling ruins now crown their summits.

The ground to the north east is bad. To the east there are kyoungs on some high ground. On the south, where the Shway zee-gone pagoda stands, is level, and, according to native estimation, would accommodate about 1,000 people.

Leave Nyonng-oo at 5.30 P.M. For some way the east bank is high and rugged. After a few miles it sinks down, and both banks are low and partially cultivated, particularly the sloping bank down to the water. Plenty of cattle are to be seen all about the place. We pass by some islands. It is hardly any use to notice these, as they are always changing, and while there is a large island to-day there may be a deep channel next year, or after the first flood. At 8 o'clock Puppa Doung bears south-east half south, and is topped with clouds. There are many villages along both banks. The ground slopes up from the banks and disappears in soft undulations. It is well wooded, but bright patches of cultivation are visible all through the foliage.

There are some remarkable fine trees along the bank. The largest are tamarind, banvan, and mango. The west is a low alluvial plain, roughened by hillocks along and in the vicinity of the bank, and covered with trees and bushes inland. Some villages are pressed, and one extensive one in two parts. This, which we pass at 8.40, is Pakoko, a large town. A great quantity of pagodas cover a hill on the bank. The houses extend along the bank, below and above it, till joining another bristling mass of pagodas scarcely a mile further up. Many of the houses appear *pukka*, and the place has a very imposing look. The country slopes up inland, and above the town are two isolated hills. A dark dense tope of trees forms the northern boundary of the town, to the north of which appears extensive cultivation. On the east bank are the villages of Kayinteh and Dahat-tha.

At 9-30 we are just off Koon ywa. This is a large village on the west bank, situated on a bluff. Below the village is a large pagoda with two large griffins at the entrance. It extends for a mile or more along the bank. The water here is very broad. The river bank for a long way below this has been cultivated, and is of firm clay, with a gentle slope. The houses are bamboo and mat. On my return journey down the river we arrived here in the afternoon, so I landed my ponies and rode inland some miles.

The country slopes up gently from the river, and about a mile distant is a large open space with a little brushwood, soil sandy. It has been under dry cultivation, but not this or last year. There are in some places hedges separating

the fields, but the fields are large, and the hedges not always in good repair—in fact, there are few places where a pony cannot pass them. The ground continues to ascend for three or four miles from the river, and is undulating and open. The portions not cultivated are covered with low, open brushwood. There are plenty of cattle all about here. All are fat, contented-looking animals.

At 3½ miles from river reach the village of Pong loun-gyan. A road to south-west leads to Pakoko three miles distant, and one to north to Kyee-wee one mile distant. Beyond the village the country rises in a wave for 500 yards, then it sinks slightly so as to form a slight valley, which extends to a small hill to north-east. This country is partly dry cultivation and partly open scrub jungle. On my journey up the river we only made a short stay at Koon-ywa, and then proceeded up the river.

Leaving Koon-ywa at 11 '98, we have to go for some distance to south and south-east to clear the end of a sandbank. After passing this the river is a great width, the land on both sides being very flat. This is, however, soon broken on the east side by a couple of hills.

North of us is the large delta island formed by the Chin-dwin river. The weather has been cloudy and unsettled for the last two days, and there was rain last night.

Our course lies entirely amongst islands, which makes it more or less winding. Some of these are cultivated, and others covered with long grass.

At 2-30 we make for the east bank. On it are three groups of houses, about 80 in all, and 2 or 3 miles inland is a cluster of pagodas and a large village. The country is better cultivated than formerly. There are fewer trees about the country inland to east than before and it looks much more open. The bank is steep and of clay. To the west nothing is visible but islands low lying and green. The western bank must be over six miles off.

Arrive Myin gyan 3-10. The town is situated on low flat ground. The bank is bad for landing. It is of clay rising abruptly from the water, and large sheets are washed away annually. It is from 40 to 50 feet high and steep. The Agent's house is north of the town, about a mile distant.

The bank here runs north and south, the Agent's house being on some higher land at the northern end. From thence a long low spit extends to the north-west.

On my return down the river, I landed here with my interpreter and took a rough survey of it, and saw the ground best suited for camps. This lies to the north and north-east, where there are some kyongs and much open ground.

Myin-gyan is a flourishing town, with a population of about 10,000.

Behind Myin gyan to the south-east is an extensive collection of old pagodas, and to the south is a large plain.

The ground to the north above mentioned is raised, and would make good camping ground. There are several pagodas, which, although not affording shelter themselves, would be a good foundation for building on, as the courts are all paved, the ground about is firm, level and open, some has been under dry cultivation. There is a kyong near the pagoda first mentioned, and further north another group of pagodas and a large kyong.

Along the top of the bank is a road, and on the east of that the town. If it were necessary to widen this road, the huts could easily be knocked down. There is besides a road running through the middle of the town. When I

arrived at Myin-gyan on my way up the river it was raining—an unusual thing at this time of year

Leave Myin gyan at 9-5, and pass the bluff to north It has many

Sixth day 24th November
1881—from Myin-gyan to Nga-
soon 45 miles.

pagodas on it On the west are a couple of groups of houses, the land low and cultivated Four miles north-east of this is a cluster of pagodas and a village, and north-west of this is an isolated blue mountain, and south-west of that another The river here is very wide, and it is difficult to say which is the river bank and which island and sandbank There are many villages to the west, and the whole of that country must be fertile Many groves of palmyra, mango, and tamarind trees indicate the situation of inland villages, and between them the country appears to be well cultivated

We pass the following villages since leaving Myin-gyan —

Choe-pan west—An extensive place with several pagodas.

Myay-dan west.—Country to south flat and open

Shway hlay gone east—Country to east of it flat and open

Shway hlay gone west—Eighty houses

Yandaboo

Before reaching Yandaboo is a large village, extending a mile or so There are a couple of large pagodas and many smaller ones. Six or eight miles behind these is a small range of isolated hills

At 11-15 we pass the mouth of the Chiu-dwin, and round a point to the

Yandaboo.

east is the village of Yandaboo,—famous for the treaty made there in 1826 between the Burmans

and the force under Sir Archibald Campbell The bank is steep and difficult, and pieces of it are frequently carried away by the floods The river bank is well wooded, principally with palmyras and tamarind There is a large tree conspicuous amongst all the others for its size, and underneath this, it is said, the treaty was signed The village is straggling, and does not look very prosperous The manufacture of earthen pots is carried on to a considerable extent, and the place is celebrated for them

The country to the south is open and flat, and there are few trees

Many villages line the eastern bank north of Yandaboo, amongst them

Oo-day yah, east

is the large one of Chee-jee, which extends along the bank for about 2 miles

The country now appears much better populated and more cultivated than lower down, and villages succeed each other so rapidly, that they seem to form an almost continuous line of huts The east bank is now low, and

Chee-jee east.

slopes gently to the water At Oo-day-yah are two pagodas with gilt spires At 11-5 we pass

a number of kyoungs and pagodas on the western bank, and now the eastern bank becomes very picturesque The verdure of the banks is beautifully soft and green, and the hedges which surround the villages give them a very neat appearance Clumps of dark trees are dotted about, and between are fields of paddy or pasture land, which presents a pleasing variety to the gaze The villages of Sei-kho and Pon koh on the east bank are now passed, as well as many intervening hamlets The bank here is grassy nearly to the water's edge There is now little variety on either bank of the river Kyoungs, villages, and pagodas succeed each other in rapid succession,—cultivated and well wooded country, and to the east a chain of hills The country on both banks is flat, and the river is wide and full of islands and sandbanks

Pass Sa-matay-kone on east bank (here they produce saltpetre), and
Sa-matay-kone, east. Tha-doon-choon on west bank.

Near the village of Mya-gyee on east bank, but a couple of miles inland, is
the Kyoung-daw, or royal kyoung. A dense grove
of dark trees fringes the low eastern bank where
Mya-gyee lies.

At the southern extremity of this grove is a cluster of
pagodas, some old and weatherbeaten, and some in all the swagger of gold and
whitewash, some large and some small, but how many it is impossible to
conjecture, for with every change of our position fresh spires came starting out
of the green foliage. South of this, as far as can be seen, all is green pasture
land or cultivation, with belts and clusters of trees. While the land undulates
gently up to the foot of a small chain of hills some few miles inland, culti-
vated islands lie on our west, and beyond them the land is cultivated far
inland.

A few miles further on we pass the village of Tha-gyee-zate to east and
Shway pok pin to west. The latter village is in

Tha-gyee-zate, east.
Shway pok pin, west.

three clusters of houses, each in a tope of trees.

In the centre and southern groups are many
pagodas. There are about 200 houses in all. Half a mile of sandbank lies
between it and the river channel. South of this village the country is open
for a long distance.

We pass the following villages—

Poung hla, east bank

Nga-hway-choon east

Sin tat east.

Yay pa-dine east (and on opposite bank Sapagong west—east bank low
and country open)

Loung tha, east.

Flat low bank to north, village extensive and in palmyra groves. The
trees are very thick in places, country to south
open,—brushwood and a few trees.

Myeen moo

The country on the right or northern bank now rises from the river in
gentle undulations, on the top of one of which is a town conspicuous by its tope
of trees. Ahead on this bank, at the end of a bluff running into the river,
is a village, hidden in thick foliage.

At 4 P.M., the left bank is quite open inland, as far as can be seen. We
pass the villages of—

Nga-zoon east.

Tasin hla, east.

Let-pan-chee ban, east

Kyounk-ta-loung is a custom-house station on the Irrawaddy, where all
native boats are overhauled. It is about 12 miles
west of Ava, with which a good road connects it.

Kyounk ta-loung

There is nothing, so far as I can see, barren about this country. All the land
between this and Myin gyan is fertile and beautifully green. There is a good
deal of cultivation about Kyounk-ta-loung, and the town itself is almost hid-
den in the deep shade of the trees which surround it, and from amongst which
the spires of many pagodas emerge. Inland from this bank is said by Yule
to be very barren country, but, as I had no opportunity of seeing it, I cannot
corroborate his statement.

The eastern bank all along here is open and low, sloping up gently inland.
There are a few low bushes, which form a broken line along the top of the
bank, but there is nothing like jungle between the bank and the barren-looking

upland half a mile distant or more. Inland below the village is a small creek with a few yards of water in it. In the upper part of the village is a cluster of pagodas, then comes some high open land broken with a tope of trees. In rear of the village is a hill which commands it, and could be reached without going round the latter.

On the right bank opposite to this is a noble tope of trees fully a mile long. There is a cluster of pagodas in front, in the middle, and again higher up. Between these

and embedded in trees are the houses of the village Ywa-thit by name. Opposite to it in the middle of the river is the island of Pyashin. The high ground on the left bank here commands. At the upper end of Ywa-thit is the remains of a pagoda, the ground about which is more or less cleared. Above this and clear of the village the country is open, and about 500 yards distant is a small ditch-like creek with steep banks.

A road is said to lead from this to Sagaing.

We anchor at the upper end of the island at a place called Nga-zoon. The country on right bank is open and dotted with trees, as far as can be seen. Heavy rain.

Nga zoon

Started this morning at 6 15 A.M., heavy rain all last night, and heavy fog this morning. The left bank is now open, with a few trees scattered about. The channel is here

Seventh day 26th November
1881—from Nga zoon to Man
delay

very bad, owing to rocks in riverbed, and the course is winding. The Flotilla Company employs a European to look after this part of the river and mark the dangerous places. The right bank is low and open. The country on the left bank is quite open for some distance

Banks

from the bank and there are seen some tamarind trees and huts. South of Ava for some miles is open cultivation, and a few hundred yards inland a line of trees marks where the road from Ava to Kyonk ta lung lies.

At 7-50 the fortifications, or, more properly speaking, the wall of Ava, commences. It is an embankment about 20 feet

Ava.

high with part of the river side revetted with brick. In shape it is a succession of lines in echelon with the flanks joined. There are many gateways quite open, and the wall is of such extent that it would be impossible to defend it.

Just before reaching the beginning of the Ava wall the redoubt to the west is passed. This is a small square redoubt with a ditch. It is the only one in Upper Burma that has a ditch, but it is very doubtful if it would be tenable in the floods, as it is outside the embankment, and would be surrounded with water, if not entirely swamped. As for the wall of Ava, it can be crossed with ease in many places. When I was returning down the river, I saw a Burman leading his pony across it just behind Ava redoubt. This wall is more fully described in another chapter. It extends along the river bank in the shape indicated as far as the Myit-ngay, which flows along the northern side of Ava.

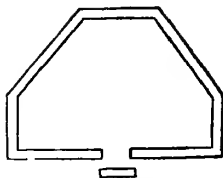
On the right bank is the Sagaing redoubt—a work the same size as the Ava one, but without a ditch. There is not a gun mounted on any one of them, nor are there platforms on which guns could be mounted.

Sagaing is on the slope of a hill. All the country on the right bank is here hilly, and the sides and tops of all are covered with pagodas. After passing the Myit-ngay, or Little River, the redoubt of Tha bya-dan confronts

Sagaing

The bya-dan redoubt

us This at first gives one the idea of a broad arrow It is, however, in shape as shown below



The Tha-bya dan redoubt is built on a lowlying bit of the river bank, and I should think would stand a fair chance of being swamped in the floods Its entrance is in the rear or north side, and is protected by a traverse There are traces of paths leading over the ramparts, and I have seen the soldiers walking across There is no ditch and no armament A small body of soldiers appears to be told off to each fort, and they and their families live in huts just outside the wall This redoubt can be approached by the land side within a short distance under cover, but troops could land and run over it in five minutes

Passing thus our course lies still east, and we pass the rocky promontory on which is situated the pagoda of Shway-kye-yet (Shway-jay yet) This is covered with kyoungs, zayats, and smaller pagodas, and is, with the rock in rear of it, the only thing like a hill between the Myit-ngay and Mandalay The hill on the river is about 150 feet high and the other about 80 or 100 The bank winds a little north of this and is covered with trees Large sandbanks fill the riverbed towards the north, in which direction it turns after rounding the point of Sagaing Our course lies along the left bank for about two miles east of Shway-jay yet when the Tajaywa creek is reached This creek flows north from the lake south of Amarapoora, and is deep In December there was a depth of 4½ feet of water in it at the only fordable place between the mouth and first bridge For an advance on Mandalay by Amarapoora, this would be an excellent place to land in the dry weather It is easy marching from hence to Amarapoora, and there it is probable that some resistance would be encountered at the junction of the Mandalay and Amarapoora embankments All about here are many kyoungs and pagodas, and from the nature of the ground a stubborn defence might be made This is, however, treated more fully elsewhere

A large sandbank extends nearly to the mouth of the Tajaywa creek running nearly north-east We run up along it and soon come to the beginning of the Mandalay embankment There is but little ground between it and the water The distance between varies from 50 to 200 yards, in places there are patches of water and swamp, where the earth has been taken out for the embankment The bank generally appears pretty level, and in some places smooth grass and clumps of trees give it a pleasant and picturesque appearance The earth of the bank is pretty firm when dry, but being entirely of clay would be sticky in the rains

The Flotilla steamers lie in front of the custom house nearly opposite the Steamer Ghat road, and here we came to an anchor on the 28th November 1881 at 9 A M

The river at Mandalay is from 3 to 4 miles wide,* and the ordinary high flood is about 22 feet, the river being within the banks

SALWEEN

The next river in size to the Irrawaddy is the Salween † The sources of this river, which have never been explored, are far north in the Himalayas, or the mountains which form their extension eastward After traversing Yunan and the Shan and Karennee States, it enters British territory at the extreme north-east corner of the province, and for some distance, as far as the mouth of the Thounng yeng, forms the eastern boundary of British Burma In this part of its course it is a broad swift stream, navigable by boats and flowing between high and densely wooded mountains Towards the south these mountains approach closer and closer, till near the mouth of the Thonng yeng, one of its tributaries, the breadth of the stream contracts so much, that in some places the bed does not occupy more than 30 yards Ten miles lower are the great rapids formed by a bar of rocks stretching completely across the river and impassable even by canoes in the dry season In the rains, when the river is swollen by the mass of water brought down from the vast tract of country which it and its tributaries drain, the rush of the water is so strong and its violence so great, that even massive logs of timber are dashed to pieces Ten miles further south are other but less formidable rapids impassable in the rains Below this are numerous islands and shoals covered during the floods, when the water rises 30 feet A few miles further south it receives the waters of the Rwon za-leng (Yon-za-leen) from westward, and the hills on the eastern bank recede and those on the western diminish considerably in altitude, and the river traverses a more level and open country, with limestone rocks on both banks, at intervals rising suddenly out of the plain into serrated lofty ridges At Moulmein the Salween receives from the eastward the united waters of the Gyang, formed by the junction of the Hlang-bhwei and the Hounng-tha-raw and of the Attaran, which joins the Gyang at its mouth Here the river splits into two branches The northern, flowing between Bha-loo-gyoon and the old town of Martaban, now not navigable by reason of sandbanks, was some centuries ago the principal entrance The southern branch flows past Moulmein, and falls into the sea at Amherst by a mouth seven miles wide By this channel vessels of the largest size can reach Moulmein, but the navigation is rendered difficult by the shifting of the sands

Vast quantities of teak timber from British and foreign forests are annually floated down the Salween and shipped at Moulmein for export The Salween was crossed about lat 25° N by Mr Baber and party on the 29th April 1876 Here it is called the Nukiang They passed over an iron suspension bridge of two spans 600 feet in length One span over the deep bed was 270 feet wide, the other over a portion of the bed exposed during the dry season was 330 feet wide Mr Baber thus describes it "The floor of this valley lies at the surprisingly low level of 2,670 feet above the sea. The river is some 240 feet lower, running between steep banks of a regular slope much resembling a huge railway cutting It sweeps down a short rapid under the bridge but further down

* Gazetteer of British Burma

† Gordon

it was evidently of considerable depth, by no means swift, with a breadth of ninety yards or more, and navigable for boats of large size, but not a punt or shallop was to be seen "

In Western Yunnan this river is always spoken of with a certain awe, owing to the malarious exhalations which shroud the hollow after sunrise, and which are said to be deadly. The natives always cross the river before sunrise.

This valley is uninhabitable during the summer months on account of the malaria, the natives retiring to the mountains as soon as their fields are planted, and returning to reap them in the autumn. Very few travellers pass, and those hurry through before sunrise. Mr Baber remarks "There may be some exaggeration in this, but the main fact is unquestionable "

Affluents

The principal affluents of the Salween are—

- 1 Toung yeen
- 2 Yon za leen

- 3 Gyang or Gyne
- 4 Attaran

(1) The Toung yeen or Thoun-gyeng separates the kingdom of Siam from the Amherst of British Burma. Its source is in $16^{\circ} 27' N$ lat and $98^{\circ} 5' E$ long, and it flows a north-north-west course for 197 miles till it joins the Salween. Its breadth varies considerably below the Hmaing-lwon-gyee, a large affluent from the north which unites with it. Close to its mouth the breadth is as much as 1,000 feet, above it there are places where it does not exceed 100. From Mya-wa-dee on the left bank in lat $16^{\circ} 42'$, long $98^{\circ} 32'$, to its mouth there are 47 rapids and falls, where the velocity of the current renders navigation impossible. Besides these rapids, there are rocky gorges caused by the meeting of spurs from the opposite ranges. This river is of importance as the outlet for the timber from the rich teak forests which cover the mountains amongst which it and its tributary the Hmaing-lwon-gyee flow. It is an advantage of this stream that, though it is of considerable size, it is so shallow that soon after the rains elephants can march along its bed without interruption. The time required to float the timber from the upper forests to the Salween is estimated at four months.

(2) Yon-za-leen, or Rwon-za-leng—This river derives its name from the fact of its running through a country once inhabited by the Rwon Shan. It rises in the north of the mountainous country forming the Salween Hill Tracts, and flowing nearly south through a narrow rocky valley joins the Salween at Kaw ka-rit. With a rapid current and a rocky bed, it is even in the dry weather navigable only with difficulty, and when swollen by the rains and boiling in furious eddies, it is not even navigable by rafts.

(3) The Gyang or Gyne is formed by the junction near the village of Gyang of the Hlaing-bhwai and the Hlaing tha-raw. The united waters flow west for 45 miles and fall into the Salween at Moulmein. It is a broad but shallow river with numerous sandbanks, navigable only by boats. These can ascend at all seasons.

(4) The Attaran is formed by the junction of the Lamie and the Wengraw. It is a narrow, deep, and somewhat sluggish stream with a north-north-west course, and is navigable for a considerable distance. A small steamer can ascend very nearly to the junction of the two streams. One day's journey from the mouth are some hot springs.

This river, or as it is sometimes written the Tait-toung, is remarkable for its extraordinary trumpet-shaped mouth, the velocity and dangerous nature of the tidal wave called the "bore," which sweeps up it, the enormous quantity of silt held

in suspension in its waters, and its tortuous course. It rises in the hills in Upper Burma some 25 miles north of Yemay-then and about 130 above Toungoo, and flows southward through the Toungoo and Shway-gyeen districts, and in the extreme south between Shway gyeen and Rangoon hill, till it reaches the Gulf of Martaban. Between Toungoo and Htan-ta-beng, a village 10 miles lower down, it widens considerably and is difficult of navigation owing to its winding channel and numerous sandbanks, and in the dry weather is not here navigable by boats drawing more than 2½ to 3 feet. Below this it narrows and the current is rapid, and from Moon towards Shway-gyeen the main impediments to navigation are the many bends with sharp curves and the strong current.

South of Shway-gyeen, where it receives from the eastward the united waters of the Shway gyeen and Moot-ta-ma streams, the river gradually widens, and the current alone impedes the ascent of large boats. Soon after passing Sittang it takes a large curve west and south, and then rapidly broadens, till on nearing the gulf it is almost impossible to tell where the river ends and the sea begins. With a breadth of seven or eight miles at its mouth, it rapidly contracts, assuming the shape of a funnel.

The great tidal wave of the Indian Ocean, joined by the tide coming up along the coast of Tenasserim, rushes with irresistible force into the mouth, and with no lateral escape sweeps up the river, forming a "bore" with an angry foaming crest 20 feet high, and at springs still from 9 to 12 at Kha-ra-soo, which carries everything before it. Following the crest is a heavy chop sea of sand and water, almost as dangerous to boats as the curling wave which precedes it. Broken by the large curve already alluded to, the bore is no longer dangerous above Weng-ba-daw.

The tide is in the dry season felt as high as Moon, but in the rains, owing to the greatly increased volume of water brought down, as far as Shway-gyeen only. Boats rarely pass below Kha-ra-soo at the mouth of the Paing kwon creek, which until the new canal to Myit-kyo was opened formed the highway of communication during the rains, and in the dry season for some 14 days in each month, before, at and after springs, to the Pegu river, and thence to Rangoon.

During the rainy season communication with Moulmein, which is at this season entirely by boat, is kept up through the Weng-ba-daw creek, the entrance to which is about 7 miles below Sittang.

The area drained by this river is about 22,000 square miles, of which about 7,000 are in British territory, and it has a total course of about 350 miles, of which the last 175 are through British Burma. The development of these 175 is little short of 300. On the west the banks are uniformly low, but on the east, hills abut on the river in several places.

Its principal feeders are—on the west, the Shwa, the Kyoung-souk, the Khaboung, the Hpyoo, and the Kwon, and on the east, the Kwe-thai, the Thit-nan-tha, the Kan-nee, the Thounk-re-gat, the Rouk-thwa-wa, the Kyounk-gyee, and the Shway-gyeen and Moot-ta-ma, which unite at their mouths.

By the inhabitants of the villages on the banks it is sometimes called the Pong-loung, and sometimes the Toungoo river.

The Shwa rises in the Pegu Yoma mountains, and flows east about 30 miles in a narrow valley between the Aw-ga-le and Ouk-hyeng too spurs, which send down numerous

Affluents of Shwa.

offshoots It then turns north and north-east, and traversing a comparatively plain country, falls into the Sittang 24 miles north of Toungoo In the rains boats 35 feet long can ascend as far as the village of Ayo-doung, some 38 miles from its mouth, where the valley narrows considerably

This stream is not navigable by boats at any season For a short portion of its course in the valley south of Naweng the bed is sandy and muddy, and the steep banks lined with elephant grass and bamboos, but higher up it is rocky, and at Ka-deng-Nuit-tohag well up amongst the hills is a magnificent waterfall

After a south-westerly course of 68 miles it falls into the Sittang about 2 miles south of Toungoo It is navigable for some 25 miles About 12 miles from its mouth it flows past the ancient site of Toungoo

Has a south-easterly course for 70 miles, and falls into the Sittang 28 miles below Toungoo During the rains boats can ascend about 15 miles, as far as Meng-lan village

This is a small river, but is navigable during the rains, when large boats can ascend for about 4 miles

Rises in the Karennee mountains about lat 19° 28 north-east of Sittang river, into which it falls 5 miles south of Toungoo Its numerous feeders have their sources in the slopes of mountain ranges, with an average elevation of 4,000 feet, rising in some places to 7,000, and keep it so well supplied that it is but little affected by the extreme drought of the hot weather, and its waters are always clear, cool, and refreshing Between its upper course and the Sittang river is enclosed a mountain tract nearly 20 miles wide and rising to 4,000 feet

From its mouth to the foot of the hills its bed is of sand mixed with granite boulders, beyond that it is very rocky

A small stream 30 miles long, navigable during rains as far as Eng-bekh village, and in the dry weather as far as Youk-thwa-wa, by boats 30 feet long From its mouth to Eng-bekh its bed is sandy, thence to its source rocky

Joins the Sittang 8 miles above Shway gyeen It is navigable by large boats to Kyouk-gyoe town, 38 miles from its mouth

The three great rivers described above are common to both Upper and Lower Burma Those that now follow commence and end in British territory

The Pegu and Poo zwon doung rivers rise close together in the Pegu Yoma, about 58 miles above the town of Pegu

Here the Pegu river, which is almost dry during the hot season at low tides, is 105 yards wide In its further course of 60 miles to the Rangoon river it rapidly increases in breadth, but narrowing at its mouth a "bore" goes up it, the effect of which is felt at Pegu.

The Poo-zwon doung falls into the Pegu river at its junction with the Hlaing just below Rangoon after a southerly course of about 53 miles It is about 440 yards wide at its mouth, and was deep enough to allow the entry of large ships, but now it is silting up from the vast quantities of rice husk discharged into it by the mills on its banks

The Hlaing rises close to Prome, where it is called the Myit-makit, and flowing in a southerly direction nearly parallel to the Irrawaddy assumes the name of Hlaing, and finally of Rangoon river, flowing past the town of that name, having received

some of the waters of the Irrawaddy through the Nyong-doung stream. It is navigable for vessels of the largest size for some little distance above Rangoon, but owing to the Hastings shoal formed at the junction of the Pegu, the Poo-zwon-doung, and Rangoon rivers, vessels of more than 6 feet draught cannot come up at low tide.

The Beeling river rises in the Pong-loung hills, and flows southward to the sea, entering the gulf between the Salween and the Sittang.

Beeling

The Tenasserim is formed by the junction of two streams known as the "Great" and "Little", it rises in the northern slopes of the hills which divide Mergui from Tavoy, and flows northward for 88 miles in a narrow valley, in some places scarcely broader than its bed. It turns then to the eastward, and at Mit-ta joins another river, which has its sources in the extreme north of the Tavoy district. The two now known as the Great Tenasserim continue southward for 230 miles between the Myeng-mo-let-khat and the great range between the British and Siamese territory. Here it turns to the west, and 40 miles further on receives the waters of the Lesser Tenasserim, the two continuing to the sea as the Tenasserim. There are several outlets to this river, the two principal ones are separated from each other by Mergui island, and the southernmost of all falls into Auckland Bay about 25 miles south of Mergui. Large boats can ascend as far as Tenasserim. The larger river is navigable for boats 100 miles.

Coasts.

The coast, as before stated, is entirely British territory *

With the exception of the country between Thavetmyo and Toungoo, all our frontiers are hill tracts covered with almost impenetrable forest jungle, and sparsely inhabited.

Frontiers

by hill tribes more or less savage. Every effort is made to civilise these wild tribes, who are continually at feud with each other. Those of north Arakan are largely occupied in committing forays, not only in the hills, but even occasionally in the more civilised country of the south.

The jurisdiction of the Superintendent of the Arakan Hill Tracts comprises the whole of the country drained by the Pay or Pee and the Kooladan, with their tributaries north of the Kooladan police station. These hill tracts have no defined boundary on the north and east, where unknown tracts of mountainous jungle stretch away towards Burma on the east and Manipur on the north.

The principal great tribes inhabiting the different hills are given in Chapter II of this Report.

Between Arakan and Thavetmyo and that station and Toungoo the frontier presents no natural obstruction, except jungle. To the north-west and west of Toungoo are the Red Karens, on the Siam frontier are "Karens".

"Toung-thoos" and "Talaings"—The Karennies are protected by us so far that we do not permit the Burmans to molest them, and they are supposed to be well disposed towards us. They have certainly no cause to entertain any friendly feelings towards the Burmans.

There are two principal passes through the Arakan Yoma range—the Aeng and Talak. These both lead to the town of Pakhan ngay on the Irrawaddy.

The northern and western frontier of Arakan is protected by police stations and the natural strength of its dense jungle-clad hills. The line Arakan-Thavetmyo.

Defence of frontier

* For description, see Part II Chapter I of this Report.

Toungoo to Karennee has for its protection the two garrisons of Thayetmye and Toungoo, a military post at Thamboola, and several police stations. Besides these, in the event of war with Burma, moveable columns would operate from both frontier stations to both flanks. What is chiefly wanted to insure the efficient protection of the frontier is a good road, and this is a want still felt.

The principal routes across this frontier are the Irrawaddy and routes 8, 30, and 43.

All the eastern frontier is rough and difficult, and the question of its defence would be influenced to a great extent by the nature of our relations with the Court of Siam.

GEOLOGY

The general parallelism of all the streams and hill ranges give an appearance of simplicity to the physical geology of the country, but, owing to the prevalence of forest, it has been found extremely difficult to determine the stratigraphy, and very little can be said to be actually known about the formations occurring.

The formations along the course of the Irrawaddy north of the British frontier to beyond Ava have been cursorily examined, as also a tract of the Upper Salween, but little is known of them, and the upper part of Pegu is geologically unknown.

The following are the groups in which the rocks found in Burma have been arranged, with their approximate geological position —

Name	Rocks	Supposed geological age
i — Newer alluvium	Blown sand littoral concrete, regur and recent alluvial deposits	Recent
ii — Older alluvium	sands and gravels of the older river alluvium laterite &c.	Post-tertiary
iii — Fossil wood group	Sands gravels &c with silicified wood and bones of mammalia	Pliocene
iv — Pegu group	Shales and sandstones occasionally calcareous fossils numerous	Miocene.
v — Nummulitic	Shales and sandstones with some limestone bands containing nummulites	Eocene
vi — Negrais rocks	Similar but much hardened and sub metamorphic in places	Eocene or cretaceous.
vii — Mai group	Limestone sandstone calcareous shales &c with ammonites in situ	Cretaceous
viii — Axial group	Shales sandstones, &c more or less altered and occasionally schistose	Triassic
ix — Monlmein group	Limestone reddish sandstone and shales	} Carboniferous.
x — Mergui group	Slaty and schistose beds grits &c	
xi — Metamorphic	Gneiss mica, slate &c with granite veins	Azoic.

Of these groups, the three uppermost form the greater portion of the Irrawaddy valley. The Pegu Yoma consists entirely of the miocene Pegu group, and the Arakan Yoma and the spurs to the eastward and the westward of main range are chiefly composed of nummulitic, cretaceous, and triassic beds. The carboniferous limestone and its associated beds, together with the Mergui group, are in British Burma nearly confined to the Tenasserim province, the former extending northward into Martaban, whilst the main area of metamorphic rocks lies to the east of all the other formations. The Burmese gneiss series consists

of more or less granitoid gneiss, hornblende gneiss, crystalline limestone, quartz, and schists of various kinds. In many places the gneiss becomes a true granite.

Metamorphic rocks occupy a large but unexplored area in Upper Burma. They form all the higher ranges in the neighbourhood of Ava, and extend throughout a great portion of the country, extending thence to the Salween. Further to the northward they extend from Bhamo to the neighbourhood of Momi in Yunnan. The Irrawaddy below Ava turns to the west and flows through newer rocks, whilst the crystallines continue to the southward, forming the Red Karen (Karennee) country and the hills between the Sittang and Salween, and extend into Tenasserim.

The gneissic rocks of Burma have more resemblance to those of peninsular India than to the crystalline formations of the Himalayas.

Near Moulmein the limestone is extremely conspicuous, and forms large hills and ranges, extending far to the south south-east up the valley of the Attaran and Lami. The same rock occurs east of the Salween, but it does not extend far into Martaban, and is wanting in the Sittang valley. Further up the Salween, however, in Karennee and elsewhere beyond the British frontier, large tracts of limestone occur, probably belonging to the carboniferous series. Limestone is said to abound in the Mergui Archipelago, and may very probably be, in part at least, identical with that found near Moulmein.

Until fossils are better known, it is impossible to say whether the Moulmein group exactly corresponds to the carboniferous beds of the Himalayas and the Punjab. There can, however, be no question that both are of the same approximate age. The occurrence of marine fossiliferous rocks of the carboniferous period at the two extremities of the extra peninsular area of British India, and the complete absence of any marine palaeozoic fossils within the peninsular region, afford the most striking illustration of the great divergence between the geological history of peninsular India and that of the surrounding countries.

In the Arakan range the rocks of the main range consist of rather hard sandstones and shales, greatly contorted and broken, traversed by numerous small veins of quartz, often slaty and sometimes schistose. These extend southward nearly to the parallel of Promé. The only characteristic beds are some white speckled grits, interbedded with shales and sandstones 35 miles west of Thayetmyo, a band of dark blue shale with conglomerate, part of which is calcareous, and some thick-bedded shales passing into massive sandy shales, with hard nodules interspersed. To the northward a band of limestone much thicker and purer than that of the Lhwa stream has been traced in several places.

There is some probability that cretaceous rocks may exist in Tenasserim. On the Lenya river in the extreme south of the province a bed of coal occurs. The rocks associated with the coal are soft clays and sands, having a more recent appearance than those accompanying the other coal seams of the Tenasserim province, and these other seams are, it is believed, not older than eocene. Above the coal is a series of soft muddy sandstones, clays, marls, conglomerates, and a few seams of carbonaceous matter. Nothing has been ascertained as to the relations of the coal-bearing beds to other formations.

In Pegu, away from the base of the hills, comparatively soft, unaltered fossiliferous beds are found belonging to the tertiary period. These strata appear to rest on the hill beds.

North-west of Promé serpentinite occurs. Hills composed of this substance can be distinguished at a distance by their barrenness. They appear to support

little except grass and a few bushes. The greenstone hills are covered with luxuriant forest. The largest mass of serpentine known forms the Bedonng hill, and is some 5 miles in length nearly due west of Thayetmyo. Another group is west of Henzada, scattered over an area of 26 miles.

The main outcrop of nummulitic rocks extends from north to south throughout the province of Pegu, east of the Arakan hills and west of the Irrawaddy. The beds have a general dip to the eastward.

Petroleum has been found in a few localities in Pegu within the older tertiary area, and it is probable that when mineral oil occurs in later tertiary beds, it has been derived from the underlying eocene strata. The most important wells in Burma are at Yaynangyoung, 80 miles north of the British frontier. They are situated on an anticlinal. All the rocks are very soft, too much so for any fissures to remain open in them, and the mineral oil is apparently derived from a porous stratum.

The most important coal localities known in Tenasserim are Thataykhyoung and Hemlap on the Great Tenasserim river, about 6 miles apart. Some coal also occurs on the Little Tenasserim river.

The Irrawaddy valley from the British frontier to the neighbourhood of Ava where the metamorphic area is entered, consists of the same tertiary rocks as are traversed by the river in Pegu. It is uncertain whether any true nummulitic rocks occur in the neighbourhood of the river, or whether all the fossiliferous clays, shales, &c., should be referred to the Pegu miocene group, but the latter is well represented. About 50 miles north north east of Yaynangyoung and 25 to 30 miles east south east of Pagun, both large towns on the Irrawaddy, the extinct volcano of Pappu rises to a height of 3,000 feet above the undulating country, composed of phocenic sands and gravels. The peak consists of ash breccia, but lava flows, mostly trachytic, form the lower slopes and the surface around the base of the volcano. Amongst these flows some consist of a beautiful porphyry with crystals of pyroxene.

Here and there on the edge of the alluvial tracts of the Irrawaddy and Sittang rivers in Pegu and Martaban laterite of the detrital low level type is found, forming as usual a cap to other rocks, and having a very low dip towards the river from the sides of the valleys. The laterite appears to form the basement bed of the post-tertiary gravels and sands, and laterite gravels are largely dispersed through the older alluvial deposits. A few patches only of laterite occur in the Myanong district, west of the Irrawaddy, but the rock is more common along the western foot of the Pegu Yoma. To the east of this range laterite is generally wanting, but to the east of the Sittang river there is a well marked belt of this formation along the base of the metamorphic hills. The lateritic rock here forms a plateau, rising 40 or 50 feet above the alluvium of the Sittang valley.

Along the margin of the Irrawaddy and Sittang alluvium there is a broad but interrupted belt of undulating ground, clearly distinguished from the flat alluvial plains near the river, both by the greater inequality of its surface and by its more sandy character. This tract is known as "Eng-dan," or the country of the "eng tree." The "Eng dan" tract is composed chiefly of gravel derived in a large measure from the neighbouring hills, but partly from a distance, a portion being washed from the top of the hills, and the rest deposited by the river. Besides this, large tracts of the same older alluvial deposits are found in places isolated in the delta, occasionally being raised to a considerable height above the flat country around. One such

tract, 20 miles long from north-east to south-west by 10 broad, occurs east of Nga-putan, south of Bassein

Another of about the same dimensions lies to the south-west of Rangoon. These may be ancient bhangar deposits, or may be caused by local upheaval

There is no important expanse of alluvial deposits in the valleys of the Burmese rivers. The beds of all immediately above

the deltas are formed in places by older rocks, and there is no such continuous alluvial plain as is formed along the course of the Ganges and Indus. Some tracts of alluvium occur here and there, but the wide undulating plains in the neighbourhood of the rivers in Upper Burma are composed, not of river alluvium, but of the "paleocene" fossilwood deposits. The Irrawaddy delta extends from the Rangoon river to the Bassein river, and the head of the delta may be placed near "Myanong." The first important distributary, that forming the head of the Bassein river, leaves the main river a little above Henzada, but water overflows in floods some miles above Myanong, and finds its way to the sea by the Myit-ma-kha-choung, the origin of the Rangoon river.

The alluvial plain and delta of the lower Irrawaddy consists mainly of a clay very similar to that found in the Gangetic plain, but containing much lime, and in consequence poor in kunkur. The colour is generally yellowish brown, sometimes reddish, owing to the presence of peroxide of iron.

At Memboon on the Irrawaddy, and in the islands of Ramree and Cheduba on the Arakan coast, mud volcanoes occur. Those of Ramree are the most interesting, as they alone, as far as is known, are subject to eruptions of great violence, and from them alone stones have been ejected and flames emitted.

The soil throughout Arakan is alluvial, mixed with sand in places. The islands are of volcanic formation, and though rocky, are fertile. With the exception of iron and limestone, which are found in small quantities,—the former in the island of Ramree,—there are no mineral productions of any value in that division.

The soil of the delta of the Irrawaddy is very rich, and when cultivated gives a high return. The Pegu Yoma range is composed mainly of brown or grey slate clay, alternating with beds of argillaceous sandstone, assuming at times a basaltic character. Overlying the slate clay is a bed of laterite, forming an undulating tract about 13 miles wide, which when on the surface is always covered with trees or bamboos. The Arakan range abounds in limestone, and in some portions granite, &c. The soil in the northern portion of the valley of the Irrawaddy was reported to be well suited for the growth of cotton, but rice is the principal cultivation.

The soil of the upper portion of the Sittang valley is clayey mixed with a good deal of sand, the sand disappearing towards the south. The chief formations of the small hills is laterite, and but few rocks are met with in the low land to the west of the river. To the east of the Sittang large masses of limestone rock rise suddenly out of the soil to a height of 400 or 500 feet. The soil of the northern portion of Tenasserim is alluvial. Stratified sandstone is the prevailing rock in the north, intersected with veins of quartz. Laterite is also prevalent, and bituminous shale is formed below the rocks. At Amherst there is a granite reef, which is uncovered at low tide only, and towards the south granite with white felspar becomes the main formation. Clay, slate, and micaceous iron are being found on the eastern slopes of the hills.

ECONOMIC GEOLOGY

The only detailed accounts of the appearance and character of coal seams in Upper Burma are by Dr Oldham and by Dr Anderson in 1864

Some notes by Major Strover on the mineral resources of Upper Burma, more recently published, give additional localities, and these it will be most convenient to mention first

Coal is known to exist at Thingadaw, about 70 miles above Mandalay, at Shway-ga, below Bhamo, at Mine baloung, in the Shan States east of Mandalay, in the Yaw district at Yag ngaw, east of Nal tank. It is found at Pagan and Shimpaya. Major Strover says the coal at Mine baloung has been examined by a mining engineer, and that it is said to be a true mineral coal quite equal to the best English. Coal is known to exist in the Hookong valley, where amber is found.

Thingadaw, lat $24^{\circ}45'$, long 95° — This locality is situated on the western bank of the Irrawaddy, at some distance from the three points where the coal outcrops visited by Dr Oldham lie. The most southerly of these is in a stream bed 10 miles west of the village of Tamhning.

The seam, which is $\frac{1}{2}$ feet thick, dips to west 30° , south at 15° . It contains a large proportion of impurity in the form of black powdery soot and black clay. It disintegrates rapidly on exposure, and even at first, on account of its flaky and cracked condition, it cannot be got out in large lumps. In the year 1855 it had been worked to some extent, but its sale in Pegu had not proved remunerative.

The second locality is on the upper waters of the Kibung stream, 5 miles further north and 5 miles west of Thingadaw. The coal here with the imbedded shale is 3 feet 6 inches thick, dip 50° to 80° to west. The structure is flaky and woody, and includes an amber like resin in nests.

The third locality is 5 miles north west of Thingadaw. The coal is hard, compact and jetty, with small imbedded lumps of amber like resin. The thickness is 3 feet 9 inches to $\frac{1}{2}$ feet, and the dip 50° to north east. Both floor and roof are good. This is the most promising locality of the three. A good deal of coal had been raised, but none removed, as the country was impracticable for carts, but as the distance was only 7 or 8 miles to the Irrawaddy, Dr Oldham considered that the deposit was likely to become a valuable one. There is now a depot for this coal at Thingadaw, where the steamers take in fuel.

Dr Anderson visited two coal mines to the west of the village of Kah yuet, which appear to be further south, though possibly on the same horizon as those above described. One of these called Lek-ope-bin is 6 feet thick, and the dip is to the south west at an angle of 35° . It is distant about 5 miles from the river. The other is at Kel zu bin to the north-east of Lek-ope-bin on the banks of a small stream. It is said to contain the best coal. Two of the openings had been flooded, and the other only recently commenced.

Burma — Considerable deposits of peat are believed to exist in the higher valleys of the Salween and Irrawaddy rivers, but particulars regarding them are scanty. Such lakes as the Now-gyang, near the Patheingyi range in Upper Burma, recently described by Mr S. Peal, may be expected to have in connection with them large peaty deposits.

Upper Burma — The earlier accounts appear to refer to only one neighbourhood, that of Yaynan gyung, as yielding petroleum.

Petroleum

Yaynan-gyoung, lat $20^{\circ}18'$, long 95° —The following account is chiefly compiled from Dr Oldham's report, printed in Colonel Yule's *Mission to Ava* in 1855 and Colonel Yule's own remarks on the subject in the same volume. "The wells are situated on a plateau surrounded by ravines at a distance of about $3\frac{1}{2}$ miles from the town of Yaynan-gyoung. They are said by Dr Oldham to be distributed in two principal groups, at two miles distance from one another. It is considered that the oil is derived from a stratum containing lignite with a large proportion of sulphur. In one of the ravines an outcrop of a bed of this character was seen from which oil was oozing. According to the natives, after passing through the sandstones and shales which are visible at the surface, they sink through a black rock about 10 feet thick, under which is a yellow bed from which the petroleum issues, and the colour of which is probably due to sulphur. It is believed that these rocks belong to the tertiary formation, and it is probable that they are of nummulitic age. The wells are about 4 feet 6 inches square, and descend vertically from the top of the plateau to depths of from 250 to 330 feet and on the slope from 110 to 180 feet, which would make them from 100 to 200 feet below the level of the watercourse at its base. Over each well there is a rude cross-bar and drum by which an earthen *ghara* is lowered and drawn up again by a man, who walks down an inclined plane with the rope to which it is attached. The oil thus raised is poured into another *ghara* containing about 10 viss (36½ lbs). Ten or twelve of these *gharas* make up a cartload. The oil is raised only in the morning, and the quantity which each well is known by experience to yield on the average having been raised, work ceases and the well is allowed to rest and the oil to accumulate for 24 hours. The petroleum when first extracted has in mass a peculiar yellowish green colour, is watery in appearance rather than oily, and has the consistency of cream. Some of the wells yield 100 viss, others only 60 or less. The headman of the village said there were 200 wells, others only 100. The estimated average yield was 180 viss. Taking these figures (200×180) and counting for 300 working days, the total produce would be 10,800,000 viss. Deducting one-twentieth for breakage, loss, &c., the net available product is placed at 10,260,000 viss, but by another method, founded on the number of cartloads carried from the wells, 4,500,000 viss is the sum arrived at.

In a report by Captain Strover, published in the *Gazette of India*, we have perhaps the most recent authentic account of the condition of this industry.

In 1873 there were 150 wells at Yaynan gyoung, which yielded 15,000 viss daily, of which 10,000 are taken by the contractor for British Burma and 5,000 by the contractor for Upper Burma. The total annual yield is 6,000,000 viss, or 9,375 tons. There are many abandoned wells and wells that yield very small quantities.

There are also 50 wells at Pagan, which yield 1,500 viss. The oil there is in a more liquid state and more suited for burning than that at Yaynan-gyoung. The total annual outturn in Upper Burma was, therefore, in 1873 6,600,000 viss, or 10,312½ tons.

Hookong Valley—Captain Hannay enumerates gold with other products of the Hookong valley. It is found both in dust and in pieces of the size of a large pea. The rivers which produce the greatest quantity are the Kapdnp and Nam-Kwan. Pits are dug on the banks of the former, and the gold is found in the old alluvial deposits. In quoting the above account, Dr Anderson adds that he was

told by a Kampti Shan and the Chinese at Momien that gold is abundant near the supposed junction of the two main streams of the Irrawaddy in the Kampti country

Upper Irrawaddy —In the upper parts of the Irrawaddy, both at Bhamo and near Thingadaw, where the coal mines are, gold is obtained in the sands. Near the coal mines of Ket-zu bin, which are some miles about due south of those of Thingadaw, Dr Anderson states there is a small rivulet which is auriferous. He was informed that a single washer could earn the equivalent of three shillings a day.

Upper Burma, Shan States —At Kyouk tat, a large village, there are some smelting works for the argentiferous galena which occurs in the limestones of the district.

Silver

MINEFRAI RESOURCES

There are good grounds for supposing that this metal exists extensively

Gold.

In former years it was imported from China as much as 400 or 500 viss annually, but now only 200, and that from Rangoon. It is greatly used in the decorative art, and appears generally plentiful.

The following are the names of places where it has been found —

Mo gong —In this district there seems to be a goldfield which, if properly worked, would prove productive. They were pronounced by a Mr Gowing to be as productive (and more so) as any in Australia, but very malarious. Since then there has been no attempt to work them.

To the north east of Mandalay in the Shan States there is a field of gold, and with energy much gold might be extracted. This is also malarious.

Thayelpiere ywa —Near the Myit ngy, on the road to Pyyong shoo, to the south-east of Mandalay, the gold quartz is found in abundance, the reefs cropping up from the ground, and there is reason to believe that very valuable gold mines are in existence and could be worked and developed with very little trouble. A piece of quartz from here $3\frac{1}{2}$ lbs weight produced exactly $2\frac{1}{2}$ ticals of gold (about $1\frac{1}{2}$ oz.)

Yam district, south west of Mandalay —Gold is obtained here in fair quantities from alluvial deposits. It exists in Sagaing, Kannee, Sui-joo, and is also obtained from the Chin-dwin river, and indeed it is procurable from the sands of most streams between Mandalay and Mo-gong. From this profusion of gold in the rivers and streams, it follows that it must exist in large quantities some where in the mountains.

The most prolific mines are those of Bawyne, Kyouk teh, and Toung byne

Silver

near These law, north-east of Mandalay, but it is found mixed with lead.

Kampanee —This mine yields as much as 40 ticals silver and 20 viss lead to one basket of ore, while the poorest mine gives 1 tical silver and 30 viss lead.

Bandween, Bandween gyee, and Sugawng —In these and other mines silver is found unmixed with lead.

This metal is found in the Shan States, but it is not worked, also in

Copper

Kolen-myō and Sagaing. At Bawyne and Kolen-myō the malachite appears of a rich description.

It is plentiful in Yunnan.

Iron abounds in the Shan States and district of Pagan. A rough manufactory exists at Puppa-toung, but the outturn is inconsiderable. To the west of Sagaing for miles

Iron.

up the Irrawaddy a rich hematite abounds.

Lead. Abundance of lead is extracted from galena in the Shan States

Tin Tin exists in the Shan States to the south-east of Mandalay, but has never been worked, it is generally imported

Platinum This is said to exist in the Shan States, but there is no reliable information on the subject

Upper Burma—According to Dr Oldham, the copper required at Amarapoora in 1855 was all brought from China, it amounted to about 35,000 viss (= about 57

tons) per annum. Copper ores were said, however, to be abundant in the Shan States, and a rich deposit, 80 miles from the capital, is specially mentioned. Dr John Anderson states that copper is brought into Momi from a range of hills near Khyto, and he considers that it might possibly become, with other metals, a regular export. In 1873 the supposed rich deposits of copper in the Shan States were still unworked. Major Stroker states that there is a rich description of malachite at Bawyne and Kolen-myo. Copper mines at Sagaing had been worked by the Chinese, but were then abandoned. Ores of copper are believed to be plentiful in Yunnan.

Upper Burma—Although it is commonly said that no Europeans are ever allowed to visit the ruby mines of the king of Burma, there are, as a matter of fact, two descriptions by Europeans who have visited them. The first was by the Père Guisepppe B'Amato, the date of whose visit is not known, but it was before the year 1833. The other visitor was Mr Bredimyer, who about twelve years ago was for a time actually in charge of certain mines (not the principal) which are within 16 miles of Mandalay. He may have also been at the other mines, but that does not appear from his manuscript description.

Kyat-pyen—This place is situated about 70 miles to the north east of Mandalay. It is, according to the Père, surrounded by nine mountains, which surround seventeen small lakes. The mineral district is divided into fifty or sixty parts, each having a distinct name. Mining was only carried on in the soil above water level. Square pits were dug down to a depth of 20 to 30 feet, and the detrital gem gravel, which is obtained in beds of various thicknesses and extent, was drawn to the surface and washed. Lateral galleries from these shafts were sometimes driven, but the influx of water soon caused the shaft to be relinquished and a new one opened. Besides rubies, sapphires, topaz, and oriental emeralds were also found, spinel is abundant. All stones above a certain weight were supposed to become the property of the king, but some were smuggled away. Chinese and Tartar merchants were in the habit of visiting Kyat-pyen yearly. Another locality where there are mines is situated a little further north at Moo kop, which seems to be the same as Mogonk.

Dr Oldham, though he was prevented from visiting the mines himself, was enabled to collect some additional information when at Mandalay. He states that the rubies are generally small, not averaging more than a quarter of a *rat* in weight. The large ones are commonly flawed, and Mr Spears had never seen a perfect one weighing more than half a rupee. Sapphires, though relatively rare, are generally of larger size, stones of 10 to 15 *rat*s without a flaw occurring, while rubies of that size are seldom seen. The revenue from the mines, which are a royal monopoly, amounts to from £12,500 to £15,000 a year. The lapidaries who polish the stones live at

Amarapoora; they make use of the small rubies when pounded to grind the large ones, forming the fine dust into cakes, upon which they polish the gems.

The actual extent of country over which the gem sand occurs is not known, but it may be 100 square miles or more

Mr Bredemeyer states that the mines nearest to Mandalay are 16 miles

Sagaing hills.

from thence and 2 from the Irrawaddy The mountains there are of limestone or marble covered with red clay and decayed calc spar, they have a fractured appearance throughout, and the hollows are filled with detritus, out of which rubies, sapphires, spinels, and amethysts are obtained by washing Where this detritus is of a yellowish colour, the stones are best With a proper system of working, which would necessitate drainage of the mines, Mr Bredemeyer thinks these hills would yield largely

According to Captain Strover, the rubies from this locality are lighter coloured and therefore less valuable than those in the mines further to the north

It is evident from the above that the system of mining in practice at all the mines is very primitive, but it does not follow that much deeper mining would be requisite, as beyond the limits of the layers of gem sand, which have a capricious distribution, stones would probably not be found. A considerable number of stones, some of them being spinel, are brought to Burma for sale The topaz, being somewhat scarce, is said to sell for higher prices in Burma than it would in England

Upper Burma—It is stated that a large proportion of the rubies which are sold in Burma are really only spinel, this mineral apparently occurring also in the already described gem sands When the crystalline form is obscure, the two stones may be distinguished by their hardness, specific gravity, or their refractory powers Although of less value, the spinel rubies are largely used in jewellery

From a very complete *résumé* of the available information regarding the

Jade

ore in the Mo-goung district, 25 miles to the south-west of Mein-khum, it would appear that the pits do not exceed 20 feet in depth, and the jade is described as occurring in loose boulders Sometimes 1,000 men (Sbans, Chinese, Panthays, and Kachins) used to be engaged in digging There used to be a large trade in the mineral, much of it going to Momiën, where it was manufactured into ornaments.

At Bhamo Dr Anderson bought rings of jade for Rs 4 each of the quality which at Canton would sell for £2 Taxes are laid on the industry at all stages, and in 1836 the annual revenue derived from it was Rs 40,000

At Momiën a pair of bracelets of the finest jade cost about Rs 100 Dr Anderson describes the method of cutting the jade by means of circular discs of copper, which are charged with silicious mud and what appeared to be ruby dust. The most valuable jade is of an intense bright green colour resembling the emerald, but red and pale pinkish kinds are also highly prized

Bismuth.

Traces of bismuth have been found in ores of antimony and galena from Burma

In the year 1831 Mr Charles Lane forwarded to the Asiatic Society a button of white metal which had been obtained by melting up together some grains obtained in the

Platinum

gold-washings near Ava. Mr J Prinsep subjected this button to analysis and obtained the following result —

Platinum	25
Gold	5
Iridium and osmium	40
Iron	10
Arsenic and lead	20
Rhodium	p
Palladium	p
	<hr/>
	100
	<hr/>

The examination of a further sample by Mr Prinsep led him afterwards to conclude that the ore contained only 20 per cent of platinum and about twice that amount of iridium. The amount of osmium was not determined, but, besides the platinum and iridium, the bulk of the ore was chiefly oxide of iron. As remarked by Mr Theobald, the proportion of iridium indicated by these assays is remarkable, and a further examination is much to be desired.

It is stated that the Burmans are capable of manipulating the metal, which, if true, affords additional evidence of their well-known skill as metallurgists.

A good deal of it is brought from some streams which fall into the Chin-dwin river from the west near a town called Kannee. It is said to be collected in the following curious manner.

The horns of a species of wild cow called tean (*Bos sondaicus*), which are covered with a velvet coat up to the age of two or three years, are placed in the streams, and at the close of the rainy season, when the water subsides, they, together with the sand surrounding them, are carefully raised, with cloths wrapped round them. The horns, it is suggested, cause a concentration at these spots of the gold dust which is brought down by the streams.

With this gold dust the grains of platinum ore are found, but it is the former alone which is regularly brought into Ava for disposal.

According to Major Strover, platinum is reported to occur also in the Shan States.

By the Burmans platinum is known as shenthau, or shway-been, which means 'white gold'.

Graphite is found to the east of Nattak in large quantities on a low range of hills near the village Nyoke.

Coal exists at Shinja-daw, 70 miles above Mandalay, to the south-east of Mandalay in the Yaw district, at Yag-ngaw, east of Nattak, at Pagan and Shinpagah, and probably

near Mek-hla and Yenau gyong. Jade and amber are found above Mo-gongng.

Jade and amber. Besides the above, the following are found —

Sulphur
Saltpetre
Salt
Salt petroleum

TOPOGRAPHY

The Assam chain of mountains stretches east in a broad belt of woody spurs and ridges and grassy undulating tablelands, and taking successively the names of the races who

Features of the country

inhabit it, increasing in the elevation of its highest points from 5,000 and 6,000 feet among the Garos and Kasas to 9,000 in the regions north of Manipur, it sweeps north-east in a wide mass of mountains, of which the general direction only is known, and emerges to knowledge at the Patkoi, traversed by the Burmese armies in their Assamese inroads. Further on, opposite to Bramakond, it rises to the height of 12,000 or 14,000 feet, and further eastward joins the snowy mountains.

This lofty chain, known as the Sang-tang, sends down southwards a great meridian chain, snow-capped in places. The boundary to the west, called by the Singphos the Goolansigoung, and its offshoots stretch with a variety of ramifications, of which little precisely is known, to the southward between the Irrawaddy and the Salween.

A great mass of mountains branches south from the Assam chain, enclosing first the level alluvial valley of Manipur, 2,500 feet above the sea, and then stretches west to Northern Arakan,—a broad succession of little explored and forest covered spurs, inhabited by a vast variety of wild tribes of Indo-Chinese kindred. Still pressing to the south, it becomes better known and defined, and continues to Cape Negrais.

The tract enclosed by these ranges is quite unlike the vast levels that stretch from the base of the Himalayas. It is rather a rolling upland interspersed with alluvial basins and sudden ridges of hills.

The Irrawaddy coming from the northern snows is little known to the Burmans above the Mo-goung river. This passes through a damp, unhealthy, dreary plain scantily cultivated by the remnants of the Shan population. Mo-

Province of Mo-goung gives name to a province which nominally includes the whole breadth of Burma to the Assam hills. The greater part of this region is a howling wilderness, exhibiting levels of winter swamp and low jungle intermingled with low hills, and sometimes with belts of noble trees, the higher mountain range of Shway-doung-gyee (4,000 feet) running to the eastward screens off the Irrawaddy from the head waters of the Chin-dwin (Kyen-dwen). In its valleys Kachin villages are said to be numerous, but few habitations are seen in the open country north of Mo-goung.

Between Mo-goung and the Hookong valley the whole route may be described generally as passing between defiles* bounded by the inferior spurs of the Shway-doung-gyee range on the east and numerous irregular hills on the west. The first two days' march the country is hilly, and abounds in a variety of fine forest trees, on the second the country becomes more open, and passes through forest of fine teak trees. At Sadozant, an island in the bed of the Mo-goung river, and in this locality, Captain Hannay found the finest lemon and citron trees he had ever seen. The tea plant was also very plentiful, and the soil in which it grew most luxuriantly was a reddish-coloured clay. The Sambu-tonng range forms the southern limit of the Hookong valley, and streams flow from it north to the Chin-dwin, and south to the Mo-goung.

"Tsambu-tonng," says Captain Hannay, "is covered with noble trees, many of which I think are sal, and are of immense height and circumference. The tea plant is also plentiful, besides a great variety of shrubs, which are quite new to me. The rays of the sun seem never to penetrate to the soil of Tsambu-tonng. It may, therefore, be imagined how damp and disagreeable it is, more particularly as there is a peculiar and offensive smell from a poisonous plant which grows

in great abundance in this jungle, and the natives tell me that cattle die almost immediately after eating it"

The valley of Hookong at no very remote era formed the bed of an Alpine lake, which, like that of the Manipur valley, has been subsequently raised to its present level by long continued alluvial deposits and detritus from the hills which encircle it on every side. These deposits raised the level of the water and facilitated its drainage, until it became so shallow that evaporation completed the process and rendered the soil fit for habitation.

The valley of Hookong or Payen dwin is an extensive plain bounded on all sides by hills, being at least 50 miles from south-east to north west and from 15 to 45 miles broad, the broadest part being to the east. The hills bounding the valley to the east are a continuation of the Shway-doung-gyee range, which is high, commences at Mo-goung, and in direction north, 15° east.

From the village of Meikwon may be seen the hill near which are the sources of the Ooroo river, an affluent of the Chin-dwin. It bears 35° west from that village, about 25 miles distant.

Passes lead from the Hookong plain into Kampti, and also direct towards China through the district east of the Irrawaddy called Kacho-wanmo. From this valley also a path leads over the Patkoi range to Sudiya in Upper Assam. The country appears to be chiefly jungle, with occasional clear patches under cultivation. The plain does not show a population of more than ten to the square mile.

The Chin-dwin river, which, rising in the Shway-doung-gyee, flows through the Hookong valley 5 miles north of Meing-khwon. In the rains its breadth here is about 300 yards, and it is navigable throughout the year for large canoes. Large fishes are destroyed by a poisonous leaf which falls from the overhanging trees. The natives eat fish so killed with impunity.

About 16 miles below the Hookong plain the navigation is interrupted by falls, and another, which first bars the passage upwards at Kakaa or Kat-tha, four days north of the head of the Kaho valley, in lat $24^{\circ} 47'$. Little is known of the country in these parts. The Ooroo joins the Chin-dwin a little lower down. In the long narrow valley in which it rises are the Yu stone mines. The lower part of the Ooroo valley is said to be peopled and well cultivated. Below the Ooroo the narrow alluvial valley of the Chin-dwin is tolerably peopled, and affords rice grounds fertilised by annual inundation.

West of the river and between lat 22° and 24° is the Kaho valley. It

is a long strip, 10 or 15 miles at its greatest width, separated from the Chin-dwin by a range of uninhabited and forest covered hills, called Ungoching, and is itself, with the exception of sparse clearances for cultivation, a mass of forest abounding in varnish and wood-oil trees and valuable timber. Although its inhabitants are hardy, it is notorious for jungle fever, most fatal to strangers. The northern part of the valley called by the Burmans Thoung-thwot, and by the Manipuris Samjok, and the southern Kalay, are ruled by Native Shan Saubwas tributary to Ava. Kalay is the most populous part of the valley, and produces rice and cotton. The hills to the west of Kalay are occupied by Chins, a race which Colonel Hannay identifies with the Nagas of Assam.

The last miles of its course are through a broad, populous, and fertile champaign, and from the Irrawaddy show an almost continuous horizon of palmyra groves—always in Burma a sign of population and culture. The country between the Chin-dwin and Irrawaddy

Aurea chersonesus

is called Sonaparanta, and is supposed to be the *Aurea regio* or *Aurea chersonesus* of Ptolemy.

The Moo bisects this Doab and the country on its banks for some miles above Dibayen, lat $22^{\circ} 40'$. The country in the vicinity of the Moo above this has never been visited, but there are several towns known to exist near it. The surface of the country is traversed by several belts of hills of a general direction north and south. East of Dibayen, and 14 miles from the Irrawaddy, is the city of Mont-sho-bo. North of this is Myedu, where are said to dwell the Ekabats or Kacharis, who furnish a select part of the Burmese cavalry.

The country lying between the barren Tangyee hills that line the Irrawaddy opposite Pagan and the base of the Arakan Yoma is little known. Paths lead from it to the Kaladan valley in Arakan.

South of the Yans is the district of Salen, a rich alluvial between the skirts of the Yoma-doung and the river,—one of the most productive districts of the empire.

Through this leads the road that crosses the Aeng pass over the Yoma-doung at a maximum height of 4,600 feet, "the merits of which as a military route have been grievously overestimated. Another road, partially artificial, leads from P'haing, a Burmese town about 20 miles from Mophay-myo, across one of the highest parts of the Yoma-doung.

The extensive alluvial plain in which Salen lies stretches into the interior between the river and the outer spurs of the Arakan mountains. This plain unites with the alluvial valley of the Chin-dwin and extends south as far as Membo, 18 miles above Myin hla. South of this the country becomes more hilly and wild towards the British frontier.

Having given above as complete a description as is possible at present of the general topography of Upper Burma west of the Irrawaddy, I will now cross that river, and give what account I can of the country on the eastern bank from south to north.

Captain Yule in his report of a *Mission to the Court of Ava in 1855* remarks "Of the country east of the Irrawaddy

East of Irrawaddy from Ava to Meaday I have before said that little is known, except the names and general positions of the principal towns. The country has never been traversed by any intelligent European. The impression of voyagers ascending the river from what they have seen in the ascent of such heights as are within reach is (and it is an irresistible impression) that the whole interior of the country is a regular 'despoblado' (uninhabited waste) of dry rolling hills, dotted with thorn bushes and euphorbias." This, though true in part, is erroneous as a general description.

"The tributaries which enter the Irrawaddy on this side are not many of them perennial, at least in the lower part of their course, but in the rains they carry large bodies of water, which are diverted and utilised in raising crops of rice and cotton in the valleys, which are sometimes extensive."

The country of Toung-dwen is of this description. It is watered by the Karen-choung and the Yen-choung, two of the largest tributaries from this side. Cart roads lead from it to Patanagó, Magway, and Yaynan-gyoung. Villages are numerous in the plain around Toung-dwen.

Between Toung-dwen and Yemay-then to the east extends the watershed range of hills between the Sittang and Irrawaddy valleys. They run north and south from near Pegu upwards, and appear to die away nearly abreast of

Yemay-then, not being here of sufficient altitude to form any obstacle to the passage of cart roads which exist between that town and Pagan and Yandaboon the Irrawaddy

Eastward of Yemay-then come the mountainous regions which intervene between Burma proper and the Shan States. These mountains are part of the extensive system which bound Burma on the east. Forty-five miles south-east of Ava Dr Richardson descended from these mountains by the Nattik pass, which he speaks of as the longest and most laborious pass in Burma. This reminds us of the descent which Marco Polo describes as leading to the kingdom of Mien and occupying 2½ days to descend. This, however, cannot be the one he alluded to, as the capital of Burma at that time was Pagan in lat 21°13'. It may have been Tagoung or Old Pagan in lat 23° 28' that was mistaken for the capital.

Mr Baber suggests that the route described by Marco Polo was from the junction of the Nan tien with the Salween over 300 miles to Pagan, and seeing a great part of the journey would be by boat, he thinks fifteen days a fair estimate for the distance.

The districts of Pen-the-lay and Peen-zen-myo are said to be fertile and cultivated, and Kyouk-si and the other districts immediately south and south-west of Ava are better irrigated by the small streams that feed the Myit-ngay than any other part of Burma. Consequently they are well peopled and productive. The part of this fertile tract immediately south west of Ava is known as Lay-dwen ko karain, or "the nine districts in the fields." "The wheat of Ava," says Captain Yule, "is principally grown in this neighbourhood."

The road from Hlein-det to Myin-gyan runs between these districts and Yemay-then and Toung-dwen-gyee, and is described as follows: "Two days' march over an apparently extensively cultivated plain leads to Hlein-det. From here to Myin-gyan is five or six days' journey. The first part is across a flat alluvial plain, and crosses a shallow bedded stream, dry in the hot season (the Sam moung-choung). At 18 miles it leaves the plain and proceeds through a pretty undulating tract of country, composed of sand, gravels, and rocks. After passing the watershed, a low anticlinal in this ground, an extensive view is obtained to the westward, and the lofty hill of Puppa may be seen a long way off to the west-south-west. Many large villages and towns are seen."

The country south of Mandalay is up to the village of En-ben-bo, a great plain dotted with trees. The Pan-bonng and Jagir rivers are rather more than knee-deep in the driest season.

These districts may be described collectively as forming a great plateau, having a few isolated mountains and some ridges of hills, neither high, continuous, nor precipitous. No physical difficulty opposes the formation of any description of road from the Irrawaddy to the Shan mountains.

Here an ascent of 3,600 feet leads to the Shan plateau. The passes by which the natives go from the plains to the highland are few, and are all reported to be difficult and tedious, even for the pack animals, which form the only means of transit. The ascent once accomplished, hills and undulating ground at a general level of about 3,000 feet continue to be the features of the country till the valley of the Salween is reached. These highlands may be described as a lofty plateau roughened by ramifying mountain chains, whose general direction is north and south. The hills and wilder parts of the region are occupied by various hill tribes, while the alluvial basins are cultivated by

the Shans Tea is grown abundantly over the tract between Kek-bong and the Salween, and west of that river and north of the latitude of Mandalay. Cotton is also produced in considerable quantities. Extensive pine forests are met with in all the hilly parts of this region. This region extends between long 97° and 101° and lat 20° and 24°. I now return to the Irrawaddy.

Not far above Men-goon (40 miles north of British frontier), and as far as Myin-gyan the country rises from the river in long slopes and rolling ridges. Here it is no longer within the influence of the July rains. From Promé upwards the vegetation rapidly loses its rich tropical character, and these uplands are merely dotted with sparse and stunted trees and bushes consisting largely of the beer and khyr of India, generally indicative of a dry, inhospitable soil. These uplands sink at pretty frequent intervals into decided valleys running at right angles to the Irrawaddy, into which they discharge the drainage of the interior by broad, shallow, sandy channels, always dry, excepting immediately after heavy rain.

North of Pagan this upland still exists, but is less elevated and less bare and barren, and is separated from the river by a greater or less extent of fruitful soil.

In rear of Magway the country is open and rolling, divided into fields by hedges. The roads and compounds are all substantially fenced. Above Magway the same country is met till near Yaynan gyöung, where it is barren and rocky.

Above this, as far as Pagan, the country is open and rolling, in some parts cultivated, and in others showing good pasture land, but very sparsely wooded, the principal growths being in the ravines of the streams leading to the Irrawaddy and the depressions of the country near Pagan. This plain is broken by some hills.

The country north of Pagan is more wooded than lower down. The villages along the east bank are surrounded by hedged fields. The land rises behind in a long general slope, broken by ravines towards the lower ground that fringes the river, but still apparently unproductive. The mountain of Pauppa-doung is conspicuous from here.

About five miles inland from Myin-gyan are a remarkable pair of twin hills about 900 or 1,000 feet high. Above this, the country higher and slightly rolling, eight miles inland a short range of hills. The extensive village of Sumer-kionur is separated from the higher land by an expanse of inundation during the rains. One of the very long bridges so characteristic of Burma crosses the inundation in rear.

“Behind Kyouk-ta-loung the whole country inland as seen from the higher points was arid, parched, and barren, the sandy, dry, and barren soil peeping out every where, and scarcely hidden by the stunted and half-grown brushwood that sparsely clothed it. Many cart roads, in good order, traverse the summit. This country must be inconceivably bare in the dry season.”*

A few miles above Kyouk-ta-loung the high ground, which at that place comes close to the river, retires, leaving the alluvial valley of considerable width inundated during the rains. In front of this a dense mass of wood marks the position of old Ava.

Twelve miles above Mandalay is the Madeya river, with the small village of Moa at its mouth. Two miles up the river a branch strikes off to the south, and passes between Mandalay and the Irrawaddy.

The valley of Madeya-choung is extensively cultivated with rice, and is said to extend as far as the ruby mines in lat $22^{\circ} 40'$ and long $96^{\circ} 30'$, and contains many populous villages. Round Madeya-myo is a great mass of gardens, chiefly orange, and most productive. "This mass of productive trees," says Captain Yule, "seemed to stretch for a length of three or four miles by one in width. It was a perfect forest of coconut and areca palms, jacks, custard apples, citrons, betel-vines, &c, whilst the ground was covered with dense thicket or swamped in water."

"For a mile or more the road through this dense and fruitful thicket was paved with brick, and had brick parapets on either side. Kyoungs and houses began to be scattered more and more frequently among the foliage, till passing by a wooden bridge over a fine full stream flowing rapidly to the south, we entered the town. This stream, called the Shway ta-choung, breaks off above the town from the Madeya river by which we had ascended from the Irrawaddy. It discharges itself into that creek of the great river which passes near the Arakan temple and washes the north-eastern corner of the capital" (Amarapoora).

The town of Madeya contains 3,000 houses. Four or five miles above Madeya are the marble quarries, the triple hill in which it is found being only a couple of miles in a straight line from Magway, it rises to the height of 600 feet. Eastward the ground is slightly elevated, till it joins the Shan mountains 8 or 10 miles distant. The view from the summit of this hill is thus described by Captain Yule:

"At our feet and southward stretched a great tract of green rice cultivation, but there were very few villages even in this rich plain, and much of the apparent level in other directions was quite uncultivated. But the finest feature of the whole panorama continued to be the broken Gibraltar-like ridge of the Mya-bit-doung, nearly eastward from the capital."

The valley, as viewed from the rising ground behind Men goon, from the dry and treeless Sagaing hills a few miles in rear, spreads out for 15 miles in width to the eastern line of mountains, which, emerging from the north bank of the Myit-ngay, stretch away, as far as the eye can reach, to the north-east. The long flowing sweep of these mountains singularly contrasts with the irregularly peaked outline of the Myit-loung hills south of the Myit-ngay.

The country to the east of the river as far as Sengo shows extensive rice cultivation, and a broad alluvial flat extends to the low broken ranges of the Sagaing and Thubyo budo hills. The distant Shan mountains rise beyond another plain, sparsely covered with lofty trees and richly cultivated. Above Sengo, as far as Sampenago the country is hilly and covered to the water's edge with luxuriant forest. To the east of Sampenago rises in bold and craggy peaks, to an elevation of about 6,000 feet, the Shway-oo-doung hills, said to be only 16 miles westward of the ruby mines.

Above Malay the hills die away and recede from the banks for miles. On these hills, which divide the Irrawaddy valley from the ruby mines, the people say that the snow lies for five months in the year. The country from hence to Bhamo is chiefly jungle as far as the Kachin hills to the east.

A fair idea of the country to be met with on the Shan plateau may be obtained from a study of the routes from Toungoo to Tacaw ferry and from Ledia-myo to Thamee-myo.

Western Karennee, properly so called, is a narrow strip of country 5 to 20 miles in breadth and about 100 miles in length from north to south

Western Karennee.

The boundary extends from our eastern frontier 12 miles to Sanan, a hill in $19^{\circ} 23'$ N lat and $98^{\circ} 53'$ E long, and thence carried on in about the same parallel of latitude to Prensok, a hill in $97^{\circ} 3'$ E long. It then proceeds zigzag to a point in the Nampay river in $97^{\circ} 14'$ E long and $19^{\circ} 41'$ N lat, leaving a tract of Eastern Karennee some 30 miles in breadth and 60 in depth to the east

From Kyet-pho-gyee to the north the country is a plain raised about 2,800 feet above sea level, and dotted here and there with limestone hills. It is richly cultivated, and there are numerous villages. By means of irrigation two crops a year are obtained in the lower parts. The soil is clay and loam, and in places chalk appears. Laterite is met with north of the Muloung stream, which runs south of Nong palay. The northern part of Karennee is singularly destitute of timber, the peepul tree is grown for firewood, and bamboos are carefully guarded from cattle. Close to Kyet-pho-gyee the level country ceases, and the region to the west and south is a mass of hills, but scantily inhabited. Kyet-pho-gyee itself stands on a commanding hill about 3,500 feet high, on which there are a few pine trees.

From Kyet-pho-gyee to the Nampay stream, with the exception of a mile of eng forest near the stream, the country is covered with toungya cultivation, and there are no trees. Toungya cultivation is also seen in places as far south as the Htoo-choung. The uncultivated part is very stony and covered with bamboos, small trees, and grass. Cutch is plentiful, and there are a few teak trees. With the exception of the country between the Pah-young and Kayma-phyoo streams, where there is a plateau some two miles wide covered with grass, green bamboos, and large timber, the whole country from the junction of the Nampay and Htoo streams down to the Pha stream is dry, stony, undulating country, with here and there steep rocky places. Limestone, kunkur, and lava-like looking stone abound, and south of the Koolay moo stream good slate is met with. The forest with which the country south is covered is principally eng. Here and there is teak, but most of the latter near the Salween has been cut. Several streams flow eastward to the Salween. Of these the Htoo is the largest.

In the Kayma-phyoo lead is found, and also in the Naga and Pha streams.

The Nampay stream flows over hollow ground, and is said to disappear at times and run underground. The bed of the river is very treacherous, and occasionally gives way when being crossed.

The boundary between Eastern and Western Karennee is on the north the Sago stream down to its junction with the Ngwai-doung stream. This stream is then the boundary down to the Ngwai-doung and Shway-doung hill. Here the Ngwai-doung stream comes from the west, and the boundary is continued southwards by the line of hills of which Ngwai-doung and Shway-doung are the northernmost points. On the south the boundary mark on the Takeesala stream is a large piece of swampy ground. It is said to continue southwards as far as the Ngwai-doung stream.

The general features of the country in this province consist of mountains, British Burma. jungles, and plains, and may be best explained by describing each division in succession.

Commencing from the north-west, the first division is Arakan. This consists chiefly of more or less mountainous tracts, and is a narrow strip of country lying between the hills and the sea and intersected by a perfect labyrinth of tidal creeks of all sizes.

The two valleys of the Irrawaddy and Sittang are both more or less cultivated, rice being the chief staple. From the south-eastern slopes of the Arakan range to the promontory of Martaban stretches a great alluvial plain. This is cut up by innumerable rivers, and is highly cultivated. The coast line is barely above the high water mark at spring tides. In some parts the face of the country sinks away from the river banks until it is actually below the level of high water. The face of the country is marked by "engs," or depressions. These in the rains are filled with water, and overflowing submerge the country, which, with the exception of high knolls standing up here and there, is annually inundated to a depth of from one to twelve feet or more.

The Tenasserim division is very nearly equal in area to both the other divisions together. It contains 46,730 square miles, but of this area over 24,000 square miles, or more than half, are occupied by the ramifications of several mountain chains, which contain here and there a few clearings and villages, but the greater part of the lower, and all the higher, ranges are pathless and impenetrable jungle, without sign of human habitation.

Mr Crawford writes in 1829 "The towns of the Burman empire, many of which, however, are little better than large villages, amount to about thirty-two. Of these, eight or ten are now included in British Burma."

The chief towns and their situation and approximate population are as follows —

Mandalay, lat 22°, long 96° 10' (about), is the capital of the Burman empire. All that can be seen of the city from the river is a confused mixture of spires and towers appearing above the rich masses of foliage, with which it is thickly surrounded. The city proper lies three miles from the Irrawaddy*. The population according to Dr Anderson exceeds 100,000. The city was founded in 1853.

Bhamo is situated on the left bank of the Irrawaddy in lat 24° 16' and long 96° 53' 47"—about a mile below where it is joined by the Taping. About 10 or 12 miles to the east are the Kachun hills, varying from 5,000 to 6,000 feet high, which run like an unbroken wall north-east and south-west. Low undulating land, covered with forest in some places, stretches from the Irrawaddy to the base.

The town of Bhamo, known by the Chinese as Tsing-gai, and in Pali called Tsing-ting, is a narrow town about one mile long, occupying a high prominence on the left bank of the Irrawaddy. There is a stockade about 9 feet high, consisting of split trees driven side by side into the ground, and strengthened with cross-beams above and below. This paling is further defended on the outside by a forest of bamboo stakes fixed in the ground and projecting at an acute angle. The population is about 2,500.

The climate, according to Dr Anderson, averaged a maximum of 66°, the highest temperature experienced being 80°F, while at night the thermometer went down to 50° and 45°.

* See description in Gazetteer

Myin-gyan on the Irrawaddy is the third largest town in Burma. It has a large population, and is a mart for rice both from Pegu and the adjoining lowlands. Gunpowder is

made there.

This town consists of one main street, with a number of minor streets behind, 3,000 houses, and 8,000 or 9,000 inhabitants.
Magway, Lower Irrawaddy

Near this town are the petroleum wells. Were the industry developed, the place would doubtless increase in size and importance.
Yaynan gyong Upper Irrawaddy

One of the ancient capitals of Burma. It is now only remarkable for the splendid ruins which are still to be found there, and which bear witness to its former magnificence.*
Pagan

On map marked Mout-sho bo, distant 52 miles north west of Ava, and approached by a very tolerable carriage road. It is a walled town and a place of considerable population and traffic. It is the native town of Alompra, who in 1756 made it his capital and gave it the Pali name of Ratu-thingha.
Mout-sho bo.

Seventy-two miles west north-west of Ava. It is surrounded by a brick wall, and is the principal town of a populous province †.
Debarik on map, Dubayen

Malay is the customs port for clearing boats bound from Bhamo to Mandalay. It contains about 300 houses.
Malay

With regard to the remaining towns and villages whatever information could be collected about them is given in the Gazetteer at the end of this part.

The Shan principalities may be conveniently divided into cis-Salween and trans Salween. Of these states, commencing from the Karennee country, which forms their southern limit, the first is *Mobyay*. In 1837 this town contained 50 houses and 250 inhabitants.
Shan districts and towns

Mokmay, or Moung-may, is the next, about five days' journey north-east from Mobyay and three days from the Karennee frontier. Town contains 350 houses, population about 1,750, territory small.

Monay—Two days north of Mokmay is the chief town of the state of Monay. This was the seat of the presidency of the Burmans over the Shan principalities, and they were rather numerous. The territory is considerable, extending to some distance across the Salween, and the town, 2,000 feet above the sea, is the largest of all the little Shan capitals, and contains about 5,000 inhabitants.

Nyung ywa, about 35 miles north-west of Monay, though much more by road. This, the most westerly of the Shan states, was formerly one of the largest and most important, but has now shrunk, the town only containing 100 houses and 750 inhabitants. The population of the state, however, is considerable. The nominal contingent is 1,565 men, but 500 is the utmost they can ever raise, and these they cannot keep in the field for any length of time.

Legya—Bordering Monay to the north and Nyung-ywa to the north-east is the state of Legya or Ledea, one of the most prosperous of the states. The chief town "*Ledea-myo*" contains 1,600 houses and a population of 8,000.

Theebe; on map *Theebaw* — This is a very small state north of Leda. The most direct road from Mandalay to China runs through Theebaw and Thien-uee

Thong-lay is a Shan district between Theebaw and Ava. Momiet, a considerable territory (in it are the ruby mines of Mogauk and Kyat-pen) East of Momiet is the district of *Toung-baung*

Thien-uee, called by the Shans *Tien-ue*: The town is considerable, containing 500 or 600 houses and 3,000 inhabitants. Thien-uee has the most extensive territory of all the principalities, though not the most populous. It furnishes a contingent equal to all the other cis-Salween states.

We now cross the Salween and begin from the north.

Kiang-ma-maing is the most northerly state (or two confederated states) beyond the Salween. Kiang-ma is one of the nine cities of Koshanpri. This state, which has a considerable territory, pays tribute to Mandalay, but not annually. The soil is said to be well irrigated, and the population dense and agricultural.

Muang leng gyee (*Muang-lem* of the Shans) — Of this scarcely anything is known. A considerable part of the territory north and west of Muang-lem is occupied by a savage race of Lawas, who prevent all passage through their country. Gold is said to be abundant in their hills, and they exchange a little with the Shans for salt, areca, cattle, and silver. They are said to be very numerous, and to cluster in large villages of 400 or 500 houses under separate chiefs. These communities are often at war among themselves. The Mandalay contingent of Maing-leng-gyee is nominally 3,000 men, and it pays tribute to the same power annually, and triennially to China.

Kiang-hung, called by the Burmans *Kiang-hung gyee*, lies south-east of Maing-leng-gyee, and extends on both sides of the Mekhong. It is one of the most important of the saubwaships. There are twelve petty saubwas in confederacy under the Kiang-hung chief. Four of these are to the west and eight to the east of the Mekhong. On the west of the Mekhong they are separated from Kiang-ma by savage tribes of Kachins. The city of Kiang-hung is situated on the west of the Mekhong on the side of a low range of hills. It is not walled, and there is no fort. The town contains about 400 houses, planted on little terraces cut on the hillside. There are a few monasteries and small pagodas. The Mandalay contingent consists of 5,000 men. The Chinese claim no military service from any Shan states under their influence.

Kiang-tung is another important principality, called by the Burmans *Kiang-tong gyee*. The territory extends nearly from the Salween to the Mekhong, embracing Muang kiong, Kiang-sen, and several other states. Kiang-tung contains about 650 houses, with 3,200 inhabitants. It is surrounded by brick and mud wall and ditch. The people are called by the Burmans Gong. The whole force of the Kiang-tung territory, including hill tribes, amounts to 30,000 men. The contingent is 5,000, but having to watch the Siamese, they are not always available.

Kiang-khen is the most easterly of the Shan states having relations with the Court of Mandalay. It is a small state, the number of its contingent being only 1,000 men. The town of Kiang-khen stands on the bank of the Cambodia in lat 18° 54'. The aggregate of the nominal contingents must be upwards of 20,000 men, but they are never called out, except in very critical circumstances.

The Burman territory contains some good sized lakes. One in the Mougong district is several miles in circumference. It is named Eng-dau-gyee, and is situated near the

Lakes.

village of Kamien, two days' journey up the Mo-goung river. It is said to cover what was once the site of a large Shan town called Tumansye, which the natives affirm was destroyed by an earthquake.

The lake of Inlay is in the Shan district of Nyoung-ywa. It is 14 miles long and $8\frac{1}{2}$ wide in the widest part. A remarkable circumstance in regard to this lake is that there are a multitude of floating islands on it. These are formed by the roots of the grass and weeds interlacing and collecting a small quantity of soil. Many of these are occupied and used as fishing stations.

ROUTES IN NATIVE BURMA

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3	3	Banong (harennce) to Mandalay (<i>via</i> Mokmay and Monay)
4	4	Bhamo to Koung boo
5	5	Bhamo to Man wyno
6	10	Bhamo to Mien mo
7	7	Bhamo to Mien won (in the Hookong Valley)
8	8	Bhamo to Momien
9	9	Bhamo (<i>via</i> the Nanthabet stream) to Momien and Talay
10		Bhamo to Mnang maw or Myne-mow
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12	12	Bhamo to Muang nan
13	13	Kiang tung to Kiang har
14	14	Kiang tung to Kiang hung
15	15	Lay-dea myo to Hine-det.
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18		Makhoom (in Assam) to Hookong Valley
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21		Man wyno to Bhamo (by Hotha)
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23	22	Moulmein to Bangkok
24	23	Moulmein to Bangkok
25	24	Moulmein to Bangkok Siam (by boat and land)
26	25	Moulmein to Kiang tung
27	26	Moulmein to Nong palay (in Karennee)
28	27	Moulmein to Zimmay or Chieng may (<i>via</i> Gyn and Houg-chaw rivers) and through Yahine and Valley of Meinam
29	28	Moulmein to Zimmay (<i>via</i> Salween and Yoonzalseen rivers)
30	29	Moulmein to Zimmay
31	30	Meaday to Pakhan ngay
32	31	Monay to Kiang tung
33		Monfoo to Moom thom
34	33	Manipur to Sumjok (on Chin-dwin river)
35	34	Myin gyan to Nym gyan.
36	35	Pakhan ngay to Landaboo
37	36	Patanagó to Mandalay (by land)
38	37	Prome to Ava and Mandalay (by river)
39	38	Shway gyeen to Mandalay (<i>via</i> Western Karennee and Shan plateau)
40	39	Sudiya (in Assam) to Mogong
41	40	Sudiya (in Assam) to Manchee and Irrawaddy river (by Dihing river and Phungan pass)
42		Thayet-choung to Ponsikay (in Siam) (<i>via</i> Chouk Hton and Aurga)
43		Thoung gyeen river to Zimmay
44	43	Toungoo to Myin gyan (<i>via</i> Yamay then and Hine-det)
45	44	Toungoo to Nong palay
46	45	Yamay then to Thien nee
47	46	Yamay then to Ava.

Route No 1

From—AENG OR AN

To—PAKHAN-NGAY

Territory—BRITISH BURMA

Authority—LIEUTENANT TRANT,
Quarter Master General's Dept.

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total		
	Miles	Miles		
1 Aeng				By boat
2 Sarowah	15		Aeng and several other small streams bridged	Road for first six miles quite level it then enters the hills. The Aeng river and several small streams crossed by bridges
3 Sooadah	11			Road ascends by a spur of the Arakan Yoma range, which is covered with splendid forest trees
4 Manngain	6			Road continues ascending by same spur first part through dense jungle. At 5 miles pass a small settlement well placed and surrounded by abettles. A little further on an open spot named Koaung kin and used as a halting place by travellers. Here a fine stream of water issues from the hill. Thence to Manngain the crest of the range (2 miles) the ascent is exceedingly rapid. The little blockade of Manngain built on a line of demarcation, and should circumstantially and necessary establish military post on our front or would prove an excellent position as the complete key of the Aeng Pass. The water here good but difficult of access. Reservoirs would have to be constructed for cattle.
Bed of Mine River				After descending abruptly to the foot of the highest range of the mountains the road continues along the crest of a perfect main range which is only 1 or 20 feet wide with precipitous sides. After about 4 miles it reaches a blockade called Kook runa erected across the road and enfilading it for a considerable distance. It is supplied with water from a stream at the bottom of the valley and will accommodate 100 men. Thence there is a continuous steep descent for 4 miles along the spur to the post of Koaung where are a few houses in the deep ravine of the Mine river. Last part of road far from good, over rocks and loose stones in the course of the stream it might however in a short time and with little labour be made passable for wheeled carriages but during the rains the force and depth of the torrent would probably render it impassable. Plenty of forage. The valley is completely hemmed in by perpendicular wooded heights.
5. Doh	10			Down the ravine of the Mine river. This is one of 24 villages which belong to the district of Napeh Mew a small but neat town built on rising ground commanding the whole plain, which is about a mile wide and rendering it a good military position (1882). It is surrounded by an old teakwood stockade and outside it are traces of other small works. This is the first Burmese village after crossing frontier. Leaving the Napeh Mew plain, road crosses a low range of hills and continues descending almost imperceptibly for some miles along the Mine river, to the foot of a high steep hill crowned by the Shwey Chetah Pagoda. Here the Mine river winds about and waters a verdant place of ground.

Route No. 1—contd

From Aeng or An to Pakhan-ngay—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate.	Total.		
	Miles	Miles		
6. Kwensah				Road through thick jungle amongst low arid hills. Houses for reception of pilgrims at intervals along the road. Two miles before leaving Kwensah the road leaves the hills and enters the great plain of the Irrawaddy. The Mine river (have a considerable stream) is crossed several times in the last 2 miles. Leave the high road to the left at the foot of the hills. No water procurable along highroad during dry weather.
Lebdine	14½		Mah Ford	Through a highly cultivated country with groves of trees and full of populous villages, one of which is called Shoo goun. Near Ponginghang camping ground ford Mah river navigable for canoes, and with numerous villages on its banks. The plain is completely inundated during monsoon.
Salen myo				Road passes at 2 miles the considerable village of Ponginghang, and beyond that several others on both sides of the road.
San phoo-gyoon				Salen myo contains 10 000 inhabitants and is the chief town of the fertile district of Salen which covers between 500 and 600 square miles and contains 64 villages, with a population of 300 000 souls. Here the main road from Aeng is rejoined. Round Salen myo were the remains of a teak stockade. The situation of the work is very strong: two sides being covered by large jheols, whence a wet ditch could be led round the remainder. A path for ponies and bullocks leads from this over the mountains to Talak. Water-supply precarious. The hills are very steep and the Burmese in 1890 scoured part of the road to render it impassable.
Pakhan ngay	4		Irrawaddy 1 500 yards wide cross in boats. Elephants and cattle swim	Road capital; country on both sides richly cultivated and interspersed with villages. This town was burnt by the Burmese army on its retreat.
				On the left bank of the Irrawaddy the river here being about 1,500 yards wide, but the current not very rapid. The merits of this route may be summed up as follows— The advantages of this fine road, leading in 26 or 30 marches to the capital of Ava, more than counterbalance the fatigue and trouble likely to attend the passage of artillery over the mountains, where in many places from the great ascent bullocks could be of no use in dragging the guns, which must therefore be pulled up by sheer force of arm. For the same reason it would be impossible to convey the commissariat or other stores in carts. That part of the road which requires most actual making is for 8 miles in the bend of the Mine river where the annual torrents are continually changing the positions of the rocks and stones; but this could be easily remedied, and abundance of material is at hand, with which a road might be made. Some parts of the road on the mountain require a good deal of repair and widening, and it would be requisite to sink tanks at the watering places, and cut paths to and from them; but, taking everything into consideration, it is my opinion that a battalion of Pioneers sent on one week in advance would render the road quite passable for an army. The want of sufficient open ground to encamp in would prove an inconvenience but does not exist for many marches. Though the stages on this march averaged more than 10 miles, the detachment lost only one man by death, and on reaching Aeng 8 men were so sick as to require to be carried in coolies. The loss in cattle only amounted to a few bullocks, evidently led at the start by previous long marches, and five elephants.

Route No 2.

From—AMARAPOORA

To—YUNWAN (by Thien-nee)

Territory—BURMA

Authority—From Burmese documents
published by Colonel Burney, 1837

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
1 Phra-gyih	2	0	Moday river	A city
2 Kang yih	12	14		
3 Oun lhut	16	30		
4. Thoungray	20	50		
5 Nanmo	12	62		
6 Ban gyee or Ban ky	18	80		
7 Kywe goun	8	88		
8 Bô gyo	12	100		
9 Thibô or Thee-baw	6	106		
10 Thidet	14	120		
11 Halting place.	12	132	Nam ma-zow	On the bank of the Nong-bo river
12 La-shio	12	144		La-shio is situated in the broad valley of the Nam-ma-zow stream beyond which is a high range of hills running east and west. To the south is the road to Yenny then to Hanzay. Between this and Hanzay is only 14 miles but it requires two days to mount, cross, and descend the mass of hills intervening. This range is covered with dense jungle lofty forest trees and rank underwood especially on the south side rises to about 1,900 feet above the level of Hanzay. It runs for a long way towards the E N E but to the westward it appears to break up into irregular hills, beyond which are distant ridges running longitudinally. La-shio was destroyed with the exception of the stockaded residence of the Governor in 1864.
13 Thien ni or (Thien nee)	20	164		The road to Thien nee lies across the last-named high range of hills beyond the Nam ma-zow stream. This town was entirely destroyed in 1864.
14. Tang gan	8	172		
15 Mang pwon	6	178		
16. Na-ti	14	192		
17 Nan lan	12	204		

ROUTE No 2—contd

From Amarapura to Yunnan—contd.

Names of Stages	DISTANCE.		Rivers	Remarks.
	Inter- mediate	Total.		
	Miles	Miles.		
18. Peng gno	10	211	Salween.	
19. Kuo loun	10	224		
20. Pan theng	12	236		
21. Peng hin	8	244	Nam boung or Nan phoung	At 4 miles from Peng hin cross the Nam boung river This is the boundary of Thien nre.
22. Peng ma khô	6	250		
23. Tain hot	8	258		
24. Khout-loh	6	264		
25. M a i n g Kaing	6	270		
26. Boduen-gyih	8	278		Halt at monastery Here is the great silver mine
27. Man bu	8	286		On the little hill of Luay won bi
28. Kiang mah	2	288		A city with a Governor
29. Wein Youk	8	296		
30. Maing Tha	10	306		
31. M a i n g Young	16	322		In the province of Yunnan, under the city of Shway-lee.
32. Maing La	16	338		
33. Taun-douk shue.	14	352		
34. Yun-chow (or Maing yu)	12	364		
35. Shway lee (or Maing chan)	18	382	A city	
36. Tankey	12	394		

Route No 2—*concl'd**From Amarapoora to Yunnan—concl'd.*

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediata.</i>	<i>Total.</i>		
	Miles	Miles.		
37 Nyo-Kay	20	414	Mekong cross by iron chain bridge.	
38. Tahu Kay	20	434		
39 Moun Khua	12	446		A city
40. Than-Shien han.	12	458		
41 Ta-thi or Ta- yi, city of Tah.	14	472		
42 Tao-Chow	12	484		
43. Yunnan ngay (city of little Yunnan)	24	508		
44. Keyen Nau chow	28	536		A city
45 Tahu-ahyoua Tchou hung	12	548		
46 Kueng toun hien.	12	560	-	A city
47 La-thoun- hien.	26	586		
48 Au lin-chow	30	616		
49 Yunnan gyee (Great Yunnan)	14	630		

Route No 3

From—BANONG (KARENNEE) via
Mokmay and Monay)

To—MANDALAY

Territory—BURMA

Authority—DR. RICHARDSON

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate.	Total		
	Miles.	Miles		
BANONG			Salween (unfordable)	A village of 25 houses on the right bank of the Salween marks the frontier between Siam and Karennee. River here crossed in boats. Provisions scarce
1 Ka-tchaung lan.	12	12		Direction N W Roads full of sharp-pointed rocks, bad for elephants.
2. Ban to-ee	14	26		Direction N
3. Dwom Tul wee.	15	41		Direction N E Time required 6 hours 40 minutes, including 1 hour 20 minutes rest.
4. Waterfall (halting place)	15	56	Pon	Direction N W Leaving Dwom Tulwee cross Pon river 120 yards wide and full of rapids; then follow up the valley of that river. Hills on either side $\frac{1}{2}$ to 1 $\frac{1}{2}$ miles apart. Road lies along bank of stream except in one place where a small hill intervenes. Pass ferry to Gnoe-daun. Little or no cultivation near the road. Traces of no rice even near river and on hills scattered and thin. Whole appearance of country indicates a very scanty population.
5. Nam-supee	11	67		General direction N E Road follows Pon river for a short distance, and then strikes across plain to Ban-haing a village of 30 or 40 houses. Plain plentiful. Road ascends steep eastern hills, rugged and difficult and then crossing over some uneven table land commences a second steep ascent which continues to Nam-supee. Here there is a small stream to the east of the road. The hill rises above steeply for 500 feet and abruptly for some height above that. There is throughout a disposition to the formation of plateaux on the summits of the surround log hills. On one of them is said to be situated the town of Gnoe-daun one of the most important in Karennee. It contains 400 or 500 houses, is surrounded by a stockade surmounting a mud wall, and surrounded by cultivation.
6. Sa-len lay	12	79		Direction N E Road ascends hills on east. The high perpendicular portion of the eastern range here terminates in a bluff and the hills on both sides are cultivated to their summits. The population here is much more numerous. Cross several streamlets. Guides are necessary there are so many cross roads.
7 Too-lay mal	13	92		General direction N W Road at first is over undulating tops of hills then along the bottom of a valley. After a mile or so crosses a small irrigation drain with deep muddy bottom. Some distance beyond this the valley opens out to the eastward. Shortly after Gnoe-daun can be seen due west, distant some 10 or 12 miles. From this place the road ascends and finally descends a steep rocky declivity. Country thickly inhabited. Eight large villages at one time within sight of road.
8. Ban-sa-to	7	99		This place is out of direct route. Road at first over low hills where there is a rocky descent, with frequently little appearance of a path overhung with trees; at foot of descent is a valley in which is the village of Ban-sa-to, on the bank of a small stream in thick jungle; little cultivation here. This village is a short half day's march due west from the ferry of Sa-to on the Salween from whence boats go up and down to Banong.

Route No 3—contd

From Banong to Mandalay—contd

Names of Stages.	DISTANCES.		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
9 Tura-fae	9	108		General direction N E Road at starting through jungle for most part more open in a ravine amongst the hills, in some parts rocky and unpleasant with one or two patches of clearing and small streamlets; then through country which has been some time under cultivation.
10 Pan	13	121		General direction N E Road up and down rocky hills and along rocky ravines but not so open. No signs of habitation or cultivation. Some of the hills steep and difficult, and some of the timber larger than before.
11 Kundoo	20	141		General direction N W Six hours march 10½ for elephants. At first, through bamboo jungle winding amongst the hills up the bed of a stream, ascends a steep hill on which is the Karennee boundary. From this the rest of the march lies through tree jungle more or less thick with occasional patches of a mile of bamboo and some scattered fir trees. Road better and hills less lofty.
12. Salaung	17	158	May neam ford.	General direction N E Road tolerably good at first, then very bad. A rocky descent for more than an hour at the bottom of which is a bush jungle forming the site of the populous town of Salaung, cross May-neam and reach Salaung a miserable 20-hut village.
13 Hay pang king	12	170		General direction N E Good road along valley for some distance crosses repeatedly a small stream that runs into the May neam river. Always water in its bed, though sometimes it runs for a mile or two under the sand. High hills are around.
14. Ban hóat	14	184		General direction N E Through a rocky country great portion jungle of bamboo. Country still hilly but path runs over none of any height. After 3 hours reach level plain, 10 or 12 miles in diameter a great portion covered with baobab, tamarind, and catechu trees, &c. Soil sandy and poor; numerous cattle. Large village or Ban hóat, containing 150 houses, situated on the western bank of the May king, a river of considerable size. It has a weak stockade. There are other villages in the plain.
15 Mok may	13	197		General direction S. W Leaving Ban-hóat, return for short distances (10 minutes) along the road. Then proceed 20 miles along a cart-road across the valley where enter a pass in the hills, which soon opens into a second narrow valley with a village of 20 or 30 houses. A great part of valley under cultivation; it is about 10 miles long and is crossed in 4 minutes when there is a rocky bed ascent in the bed of a winter torrent, a great part of the way over large loose rocks, which occupies an hour when it descends into the valley of May-neam in which the town of Mok-may is situated, containing 300 or 350 houses, some pagodas, a kyung and a small stockade out of repair. Though the town contains many inhabitants, they live in continual dread of the Karens.
16 May lome	14	211		General direction N. E. A good road leads diagonally across about one-half the length of the valley some 10 or 12 miles. The width of the valley is about 10 miles; soil white and poor. Ascend the hill, crossing the valley for half an hour near a stream, which pours down the

Route No 3—contd
From Banong to Mandalay—contd.

Names of Stages.	DISTANCE.		Rivers.	Remarks.																		
	Inter- mediate.	Total.																				
	Miles.	Miles.																				
16. May lome— contd.	14	211		face, and then to a piece of tableland partly under cultivation and watered by the same stream. Cross upper paddy fields and enter jungle with gentle ascent which continues within half a mile of May-lome. This village lies in a small valley cultivated in terraces, and contains some 8 or 10 houses.																		
17 Monay	18	229		<p>General direction N E Entirely amongst hills. Road generally good, and for a great part of the way nearly level through small valleys under cultivation, where it has been much frequented by farmers carts; after 12 or 13 miles passes a well and layat; from this to town little cultivation. Trap rock projecting in all directions through the clay soil</p> <p>The valley in which Monay lies extends from a few miles south of the town to 10 miles north and varies generally from $\frac{1}{2}$ to 3 miles in width. At the town it is nearly 5 miles broad. At the south end there is a fine paddy land irrigated by the Nam-Tween stream. Monay may contain about 8,000 or 10,000 inhabitants of whom about 2,000 are Burman. The houses some 18 000 in number are small and low in general; the town long and narrow and crowded with bamboos so that only a small part can be seen at a time</p> <p>The following is a table of distances from Monay:—</p> <table><tr><th>Town.</th><th>Distance</th><th>Houses.</th></tr><tr><td>Ledah</td><td>3 days N</td><td>1,600</td></tr><tr><td>Nesung Eue</td><td>6 or 8 days W</td><td>180</td></tr><tr><td>Mhomak ..</td><td>17 days N</td><td>800</td></tr><tr><td>Theebaw ...</td><td>10 days N</td><td>Small town.</td></tr><tr><td>Thetnee</td><td>13 days N</td><td>500 or 600</td></tr></table>	Town.	Distance	Houses.	Ledah	3 days N	1,600	Nesung Eue	6 or 8 days W	180	Mhomak ..	17 days N	800	Theebaw ...	10 days N	Small town.	Thetnee	13 days N	500 or 600
Town.	Distance	Houses.																				
Ledah	3 days N	1,600																				
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Theebaw ...	10 days N	Small town.																				
Thetnee	13 days N	500 or 600																				
18. Nam-Tween	4	233		General direction N W																		
19 Hay peck...	8	241		<p>General direction N W Road lies between the high ridges that forms the valley of the small stream of the Tone but soon it was only a succession of undulating hills. Between the higher ranges which here run east and west, the land is generally cultivated, but in a very slovenly manner. Three hours further on cross a spur from eastern range forming the boundary of the valley of Monay. Further on the hills recede again, and the intervening small hills are lower and brought more under cultivation, with a good deal of water in the small streamlets in the intervals. Hay-peck consists of two or three small villages on a rising ground nearly bare of trees.</p>																		
20. Nammay lean (or Ta- ng-kegen)	14	255		<p>General direction N W Road over rugged western hills, which bound the valley, by a pass. Further on, houses on the cultivation of the western side of range; passes small well and temple and within 6 miles of the town of Min-tak ascends nearly all the way over undulating hills. The country after crossing the rugged hills opens away to the northward in irregular undulations, scarcely amounting to hills, with small rocky hills projecting through them from 80 to 100 feet. A rugged chain continues to the southward for some distance.</p>																		

Route No 3—contd

From Banong to Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate.	Total.		
	Miles.	Miles.		
21 Meinpon	12	287		General direction N W Road immediately enters another range of the western hills passing generally along the bottom of a narrow ravine between high hills; then ascends abruptly and turns to the northward over rugged ridges for half an hour when it crosses the top of the pass, and enters the Meinpon territory. From this the road is winding rocky and bad for some way till it reaches the paddy fields of Meinpon water plentiful; forage scarce, especially for elephants. Meinpon contains 80 to 100 houses; the valley in which it is situated is 10 or 12 miles long by 3 broad.
Nam teongan	7	274	Pon (ford) Nam teo-ngan (small stream —ford)	General direction N W Cross Pon about knee-deep, among bunds and Pordon wheels for irrigating paddy fields leave valley and travel across hills by a much frequented road through a country of same character as last march, but less rugged pass two small patches of paddy and one small village. About half way road crosses what is said to be the highest part of the route between Monny and Ava. Cross the Nam teo-ngan after 3 hours. This is a small stream which divides the Meinpon from the Whopong territory.
22. Nam tao	16	290		General direction W Road ascends trifling hill, and shortly enters among hills with easy slopes. After a short distance it becomes rocky and the hills more precipitous. An hour farther on, passes a valley of some extent and a small village and cultivation. Another few minutes and the country gets more open; further on small village with pagodas. Country cultivated on both sides of the road a mile or two further on extensive paddy fields with water let in preparatory to cultivation, which are crossed by a raised path nearly half a mile in length a mile or so above which the water starts out of the bottom of the hill in a large stream further on another village and then the town of Whopong. This is a large town of 250 houses, and the territory capable of affording subsistence to a large population. Cross small stream, and ascend rugged incline to an irregular tableland, part of the Neaung territory.
23. Say lay	16	306		General direction W Path continues to lie along an irregular tableland on the top of the hills jungle thicket ground moist and verdant, with here and there small streams. Pass picquet house of the Neaung Eue Teobod placed here to guard against Karens. Road descends steep and difficult hill in a zigzag course into the valley of the Neaung Eue which is 5 or 6 miles wide descent lasts over half an hour. The city of Neaung Eue is about 16 miles south of this. Pass three tolerably large villages and cross a small stream.
24. Nam-leeng	7	313	Nam lack (ford)	General direction W Road crosses Nam-lack by ford, and then a height in the western hills. Soil better perfectly level and well irrigated. The boundary between the valley of Neaung-Eue and the Myelat Shan country is at the foot of the western hills. From this to the valley of the Irrawaddy below Nathe (Nat-tik) the whole of the cultivation is dry on the hills. Most of the watercourses are of considerable depth. The western portion of this height is watered by a spring about 3 feet in circumference; hence its name of Nam-leeng (good water).
25 Neaung-Eue	15	328		General direction N. Hills to the N. of S. Route along Neaung-Eue foot of range of hills which bounds the valley

ROUTE No 3—contd

From Banong to Mandalay—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	<i>Inter mediate.</i>	<i>Total</i>		
	Miles	Miles.		
25 Neaung Eue —contd	15	328	Bora (ford)	<p>of the Eue to the west, with an occasional hummock between the road and the plain of the valley. After nearly 6 hours it leaves the western hills, and curves to the eastern ones, where there is a village. Beyond this the road is a dead level; the soil has all the appearance of the bottom of a lake, and is full of shells. Cross Bora, and path leads to an irrigation stream, with very muddy bottom.</p> <p>Near this is the town of Neaung-Eue camping ground on north side.</p> <p>The town contains from 150 to 200 miserable houses. The site is a dead level and was formerly the bed of a lake which has now shrunk away about three miles to the southward and fills the end of the valley about 12 or 14 miles north and south and 2½ or 3½ miles wide between the ranges which enclose the valley.</p>
26 Nay gee	18	346		<p>General direction N W Road crosses bridge about 2½ miles from town thence across perfectly level valley of Neaung Eue to the foot of the hills on the west, passing within sight of 8 or 10 villages and some cultivation and cattle then ascends a hill rather steep in some places, and after some miles a short descent leads to a level basin 10 or 12 miles by 5 or 6 with some cultivation and cattle. The marsh ends in a short and abrupt ascent to the village. It contains about 60 houses, and is situated on the confines of the Neaung-Eue territory.</p>
27 Fway hla	7	353		<p>General direction N W The road to this place gradually ascends all the way amongst a succession of irregular hummocks perfectly bare of trees. The hills are all ferruginous earth and cultivated in many places. About a mile west of the village of Nay-gee is a much frequented path leading to Ye-may-then and Toungoo Fway hla is a large village with good houses.</p>
28. Men gee-dan	12	365	Small stream	<p>General direction W First three-fourths of the march through similar country to last march. Shortly after leaving Fway hla the route passes the much frequented road to Preada (4 or 5 miles) north of that place, with only one village near the road. The last fourth more rugged and rocky with a good deal of wood and less cultivation. Pass a small stream close to the village which consists of about 100 houses.</p>
29 Lay Eue	6	371		<p>General direction N Country same as last fourth of last march. Pass one stream of water about one mile from this village. A ridge of rocky hills to the eastward and some high hills in the distant west. Passed no villages and little cultivation till close to this village.</p>
30 Yee-ngan	18	389	Yee-beaung-byean (small stream)	<p>General direction N W Country same as last march with abrupt hills. About 6 miles from Lay Eue road passes the large village of Myne (80 or 90 houses); about 3 miles further on reach that of Yee-ngan, and a few miles still nearer the place Pen-dsein consisting of a few huts. Between Myne and Yee-ngan a small stream, called Yee-beaung-byean, is the only water passed on this march. Immediately after crossing is an abrupt ascent, at the top of which, a mile or so to the east of the road, is an old disused silver mine.</p> <p>This is a large village of 800 houses, and the last in the Shan States.</p>

ROUTE No 3—conold
From Banong to Mandalay—conold

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles		
81 Ken lay	12	401	Paang lang	General direction N W For about 6 miles road passes through same country as last march, and arrives at the top of the Nat-ti pass, which is long rough and laborious and 8,000 feet high No villages on the road to Ken lay and only three small streams of water Ken lay is the military post dividing Burma from the Shan States.
82 Ya-kine	12	418		General direction N W After a short ascent reach the large plain of the Irrawaddy called Lay-dwen-to-karyas (nine districts in the fields) remainder of march a dead level road excellent cross the Paang-lang Pass the village of Ken-dan, Dine Noboo-nye and Ma-enma, and on to the large village of Yakine
83 En ben bo	14	427		General direction N A good road through level country whole plain one mass of paddy fields with here and there tufts of jungle and numerous fruit trees Country populous 5 or 6 villages passed en route, including Young-ghi-roe on the Young ghi bouck stream by which small boats come up from Ava in 5 days. En ben bo is a large village
84 Ouen ghi	12	439	Pan boung and Jagir	General direction N W Route continues over great plain dotted with various trees cross the Pan-boung and Jagir rivers, both more than knee-deep in the driest season. Country more populous, and indications of approach to large town
85 Ava	16	455	Meyat-thee	General direction N W Route passes several large villages, crosses the Pan boung river by ford, and the Meyat-thee by fine bridge of Moung-O
86 Mandalay	3	458		Over the same plain

Route No 4.

From—BHAMO

To—KOUNG-BOO (on Upper Irrawaddy)

Territory—BURMA.

Authority—Native Explorer, 1879-80
(By water and land)

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
Mangka	6			On the 7th November 1879 the explorers left Bharno with some Shan Kadoos who were starting for Howka with salt, and took them at Ra. 5 each. Mangka is on the left bank of the Irrawaddy and was reached the same evening

Route No 4—contd.

From Bhamo to Kung-boo—contd.

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate.	Total.		
	Miles.	Miles.		
Tha-pan bin	4			On the 8th the boat reached Tha-pan-bin. From this point the river begins to narrow and the rocky gorge continues to below Myintha. The current is tremendous, and the water forms into whirlpools between the large rocks that stand up in the narrow channel. It is said that in the rains no boat can row up against the current. This is what is called first dells of the Irrawaddy and which according to Dr Anderson, varies in width from 1,000 to 70 yards. The same writer thus describes it: "This portion of the river commences a few miles above Bhamo and extends for 25 miles nearly to Tambo. Between these points the river flows under high wooded banks. At the lower entrance the channel is 1,000 yards wide and gradually narrows to 500, 300 and even 70 as the parallel ranges approach each other. As we ascended the hills rose higher and more abruptly. The inhabitants on both banks are chiefly Pooms, living in about a dozen villages from Tha-pan-bin to Pagan."
Khyon-gyee			"	Opposite to Maingka.
Tha-bya-bin	8			Left bank, 3 miles north of Tha-pan-bin.
Kod loong Tone-be				Right bank opposite Tha-pan-bin.
Thamaung gyee	2			Left bank, 3 miles above Tha-bya-bin.
Nunsouk ywa.				Right bank.
Nanthee-ywa	4			Left bank.
Loung poo				Right bank.
Pheanmney				Right bank.
Nanheh	5			Left bank.
Myin tha	...			Right bank.
Sunbo	8			Right bank
Pagan	3		"	Right bank Arrived on the 11th November
Hnote-cho	4½			On the 12th arrive at the island of Hnote-cho; there is a large village here inhabited by Shan Kadoos. The country along the banks here is described as being a fine plain, parts of which were once cultivated. At this village lines are very plentiful. The people carry on "Ksing" cultivation on the banks of the river and have gardens. The breadth of the river here is about a mile.
Poot-tay	8	"		
Shway In	2½			This stream, which is 3½ miles south of Shway-In on the left bank was reached on the 13th.
Ta-haw na				Right bank opposite Shway-In.
Mogoung Choun			"	Right bank opposite Shway-In.

ROUTE No 4—*conold*
From Bhamo to Koung-boo—*conold*

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
Konethe-ywa	2			Left bank.
Ayeing-dama	5			Left bank. Arrived here on 18th November. From Ayeing-dama upwards on every sandbank that is formed the people wash for gold with great success. The river here is about 3000 paces wide the eastern bank being 18 feet above the water. Ayeing-dama is an old and once populous city and is called after a king who lived here. There are the remains of a fort. The place was of importance till the reign of the Burmese King Alompra. A large trade used to be carried on with China and large tracts of paddy land lie fallow. At present there are 40 houses of Shan Kadoos and five of Kachins. The former pay revenue to Burma; the latter do not here nor anywhere else.
Ka-yone	4			Right bank
Man kway				Right bank
Talaw				Left bank. Gold washed for here.
Haw ka	4			The inhabitants since leaving the island of Spote-cho have been chiefly Kadoos. There is much fine teak and other useful timber here.
Koung boo	3½			The people of Koung-boo and Talaw wash for gold. Above Talaw are two tributaries, the Nam-Mala and Nam-tabet stream up these Chinese Shans and Kadoos live. They are subject to the Kanchung King. The former pay taxes also to Burma. They grow opium. The Kachins hereabouts obtain lead ore from the hills. They take the lead to Bhamo. There is a road to China from Nam-tabet by which merchants bring cloth and iron cooking pots. Above Nam-tabet is a plain occupied by Kamtees (Shan).

Route No 5

From—BHAMO
Territory—BURMA.

To—MAN-WINE

Authority—LIEUTENANT-COLONEL JEBB,
67th Regiment, 1876

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
BHAMO				
1 Tait-kan	21			Two days' march over flat ground. Provisions, ammunition and baggage conveyed up to this place by the Taping Choung river in cotton cargo boats.

Route No 5—contd

From Bhamo to Man-ya—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter- mediate.	Total.		
	Miles	Miles.		
2 Nons poung river	17	38		These marches were most fatiguing to the troops.
3 Pay seetch camp	12	50		The men were obliged to follow one another in single rank along the narrow tracks. The steepness in places was excessive and there were long descents. [N.B.—The road over the hills might easily be rendered practicable for elephants, and is on the whole well conceived. Any improvements necessary could be made without difficulty or expense.]

Route No 6

From—BHAMO

To—MIEN-MO

Territory—BURMA

Authority—DR CLEMENT WILLIAMS

Names of Stages.	DISTANCE.		Rivers.	Remarks
	Inter- mediate.	Total.		
	Miles	Miles		
BHAMO				
1. Lanat				Three days' journey through hills to Nater
2. Nater				Shans—3 days.
3. Seefan				Along a fertile plain to Seefan—3 days.
4. Ming non				Shan village—3 days.
5. Ning wong				Chinese city—1 day
6. Mien mo				Two days by hill route to Mien-mo.

Route No 7

From—BHAMO

To—MIEN-WON (in the HOOKONG VALLEY)

Territory—BURMA

Authority—DR CLEMENT WILLIAMS
and CAPTAIN HANNAY

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles.		
1 Seetung				Between Bhamo and the mouth of the Taping numerous shoals and sand islands encumber the river. There is sufficient safe way, however, both on the Bhamo side and between the main islands for boats of heavy burdens, and a properly constructed river steamer would have no difficulty in making her way to the Taping and for many miles beyond. The mouth of the Taping is two miles above Bhamo. The direction of the river is N 70° E. for about two days journey when it cuts through the Kachin range and under these hills old Bhamo is situated. To the latter place the Chinese take their merchandise from modern Bhamo by water and thence proceed overland to the Chokli or Ken of Ladlone near Man-ye-to, whither they reach in three days and from thence to Momen or Teng ye Chow in the Province of Yunnan, at which place they arrive in 8 or 9 days. The road is described as being good and quite a thoroughfare. The Taping is not navigable for large boats in consequence of which the Chinese use two canoes tied together with a platform over them. From old Bhamo the journey is performed on ponies or mules. Route under right bank at first. After passing the mouth of the Taping country rich alluvial land and capable of cultivation. Return down to main stream current strong. Pass Lebang king on the right when the shores suddenly contract, and the first rocks of the defile make their appearance. From Lebang to Seetung the course of the river is almost due north, with a gradually narrowing channel current five miles an hour.
2 Lekmat	8		--	From Seetung to Lekmat, or more than 8 miles, the hills come down steeply on both sides of the river contracting the channel to one or two hundred yards and at spots to less than half that width. At one point indeed the Irrawaddy passes through a gorge 50 or 60 yards in width, and the labour of getting a boat round the jutting rock is extreme. Rocks and ridges rise up on either side and often extend far into the channel. The most dangerous of these rocks rise on the right bank—the Elephant and the Ox. Immediately above the rocky islet of Kaymowa the Padre a little further up; and the Pashoo at the extreme edge of the defile.
3 Tehen bo				From Lekmat to Tehen bo the river gradually widens out till on approaching the latter place it is nearly a mile in width and is again encumbered with shoals and sand islands. Tehen bo on the right bank is a place of considerable importance doubly stockaded and doing a considerable trade with the Shan tribes to the westward.
4 Mouth of the Mo-goung River	10			The Irrawaddy is here still a fine river half mile broad; current two miles per hour, 18 feet deep in centre and 12 at the edge. Leaves river here.
5 Mogoung				The Mogoung river on which the town of the same name is situated is not more than 100 yards wide and the navigation is impeded by a number of rapids. The banks of the river are covered with a dense and impenetrable jungle which extends nearly the whole way to Mogoung, and there is no village till Akoung, a small hamlet on the right bank. Between this and Tapoh (the next village) the bed of the river is filled with stones and numerous rapids render the navigation extremely dangerous. After passing the last rapids at Tapoh the river expands in breadth to 200 yards, and the stream flows

ROUTE No 7—cont'd
From Bhamo to Mien-won—cont'd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total.		
	Miles	Miles		
5 Mogoung— cont'd				with a gentle current, the bed being composed of round stones. The banks are alluvial on the surface but towards the base and near the edge of the river the soil becomes gravelly. The town of Mogoung is situated at the junction of the Nam yong and Mogoung rivers, and extends about a mile from east to west along the bank of the last-named river. The town is surrounded by the remains of a timber stockade and consists of about 800 houses which includes houses and small villages outside the stockade.
6 Nam poung (2 days march from Mogoung)			Mogoung	Cross the Mogoung. The country passed through on the first two days is hilly and abounds in a variety of fine forest trees but on approaching Nam poung the country becomes more open and the pathway leads through a forest of very fine teak trees. The principal rivers all flow from the Shandoungi Gyi range of hills on the east of the route and are at this season (January) mere mountain torrents with so little water in them that the path frequently passes over their beds. From the village of Kasmien which is passed a short distance before reaching Nam poung and at which place a small stream called Engdan Chyoung falls into the Mogoung. A road leads along the former river to a lake several miles in circumference called Engdan Gye and to the north of this lake are the serpentine beds.
7 Tsado-saut Is- land (7 days march from Mogoung)			Mogoung	The whole route from Mogoung to the Hikong Valley may be described generally as passing between defiles bounded by the inferior spurs of the Shandoung-Gyi range on the east, and numerous irregular hills on the west. The defiles form the natural channels of several streams the only traces of inhabitants perceptible in the greater part of the route were a few cleared spots on the hills in the vicinity of some scattered Kachin villages. Near the mouth of the Num-sing-chyoung are a few Kachin huts constructed by that tribe during a fishing excursion and at Tsado-saut, an island in the bed of the Mogoung river were the sites of two Kachin villages.
8 Camp (on Tsamba Toung Ridge)				Up to Tsado-saut a considerable portion of the route had passed either directly over the bed of the Mogoung river or along its banks at Tsado-saut it is crossed for the last time. At this spot it is a mere hill stream, and the navigation of the river even for small canoes, ceases below this point. About 4 miles north of Tsado-saut the road ascends for 100 feet, and passes over a hilly district, which seems to run across from the hill on the east to those on the west, and is called by the natives Tsambu Toung. This transverse ridge forms the southern boundary of the Hikong Valley; it is covered with pine trees.
9 Meinik won				Descend from the ridge of Tsambu Toung to the village of Walobhum on the Eda chyoung about 3 furlongs from Meinik won or Mungkhun the capital of the Hikong Valley. The valley of the Hikong or Payendwen is an extensive plain bounded on all sides by hills; its extent from east to north-west being about 80 miles and varying in breadth from 48 to 15 miles. On the western side of the valley there are but few villages, and these thinly inhabited, but the northern and eastern sides are said to have been very populous. Meinik-won, though the capital, only contains 80 houses.

Route No 8

From—BHAMO
Territory—BURMA

To—MOMIKEN
Authority—DR ANDERSON and MAJOR
SLADEN

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles	Miles.		
1. Tah may lon			Taping 150 to 200 yards wide in dry season and navigable only by boats During rains at least 500 yards wide and navigable for small steamer up to Tait Kaw	Cross river in ferry boats. Village of Tah-mey lon on right bank and a small monastery
2 Tait-Kaw stockaded village	21			Skirt the Taping through tall grass and occasional rice clearings. At junction of Man lung and Taping rivers, a number of ruined pagodas mark the site of the town of Tsampenago, probably later date than that near Bhamo. A mile and a half north of this lies the Man lung lake 2 miles long 1 mile broad and very deep. To the east extends a succession of swamps and high grass. The western bank is high and wooded broken by two channels, through which the Man lung stream issues. The high bank is continued to the north beyond the lake, covered with tall trees. Man lung village on island near lake contains 80 houses and a large and flourishing monastery. On another island is the village of Moung po; about a mile and a half up the Taping reach Tait Kaw. The journey from Bhason to Tait-Kaw can be made by boat the whole way.
3 Pon line	12	33		From Tait Kaw the route lies over a level plain. Stretching north-east and south west rises the long undulating outline of the Kachin mountains 5,000 and 6,000 feet; on the right the Taping here a placid stream. At the village of Henthia the route diverges from the river and half a mile further passed the long and straggling but populous village of old Bhamo embosomed in dense groves of bamboo and forest trees. Outside the village is a ruined pagoda. After 4 miles through a succession of low swampy patches of paddy clearing the route enters the village of Tai het on slightly undulating ground. Here it turns almost at right angles to ascend the hills ascends about 600 feet over a series of rounded hills distinct from the main range but connected with it by spurs. From the summit of spur (1,500 feet) descend by rough path (the bed of a dried up watercourse) to a level glen of rich alluvial land, and thence ascend another spur 1,000 feet, whence a slight descent brings to a long ridge, on which are situated the villages of Talone and Pon-line. From Talone on embankment to the left descend a little distance through deep ravine on secondary spur, and after a short ascent a tolerably level pathway and another short rise lead to halting place the village of Pon line, 2,500 feet above sea. Rocks metamorphic grey gneiss and red granite. Hills covered with dense tree forest and bamboo.

Route No 8—contd
From Bhamo to Momein—contd

Names of Stages	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles		
3. Pon line— contd	12	33		Rice and other crops extensively cultivated immediately over the village a mountain towers 2,000 feet high The village is situated in a deep hollow thickly wooded with magnificent oaks a few palms and very fine screw pines.
4. Camp under Lakong mountain (4,000 feet high)	9	42	Nanpoung river over 100 feet wide 3 feet deep current rapid ford- able in dry season. Rises among hills to north east and is the limit be- tween dis- trict of Pon line and Pon see and is boundary be- tween Burma and Yunnan	From Pon-line easy road for one mile along the high ground then descend to gorge down which 1,800 feet below the Nanpoung flows into the Taping dividing the hills into two parallel ridges. The descent, at first easy gradually becomes steeper and at length precipitous the path runs into zigzags but slightly deviating from the straight line as the steepness of the declivity allows. The weathered and disintegrated surface of the massive rock had been worn down by traffic and torrents so that it often was a deep V shaped groove with about 9 or 10 inches of footway and the loaded mules found it difficult to round the abrupt turns in these steep cuttings. Large boulders, stones and sharp point masses of quartz made the travelling still more painful and dangerous to man and beast. The beds of stream are filled with fine granite Cross Nanpoung river current very strong. Road winds up face of precipice below which are the Taping rapids. Path very bad and dangerous. It crosses the hill side and enters into the face of rock for some 10 feet presenting a very new and thin turnings at a sharp angle Kachin roads seem to be purposely designed with a view to reaching the highest points on the river route and after leaving the river banks we then ascended and descended over a succession of lofty spurs abutting on the river from the main range precipitous ridges connecting them at right angles, presented tolerably level ground, but with a surface so confined that the traveller looked down into the deep gorges on both sides. Patches in valleys and on slopes of spurs were cleared for paddy. By 2 o'clock the baggage mules were so laden that we had to halt in jungle although not having gone more than 8 or 10 miles
5. Pon-see (3,817 feet above sea level about 20 houses)				Leaving camp the road lay over tolerably easy ground as it was now almost on a level with the origin of the main spurs and by noon we reached the village of Pon-see 3,817 feet above sea level. The terraced slopes are cultivated. Dense jungle and forest save when clearings indicate other villages. Camped in bamboo clumps under village
6. Manwyne (walled town)			Thamo (stream)	At 11-30 left Pon-see. Road tolerably level for a mile or so as far as Klong-doung when a steep ascent led to a comparatively high plateau closed in by hills on all sides but one covered with flooded rice terraces The steep descent to the alluvial hollow could be easily avoided by a road skirting a spur to the east sloping down to the Taping. Here numerous small streams drain into the Taping the largest of which is called the Thamo Then descend to the level of river by a gradual slope over rounded grassy hills and dried up water courses a fair road of 6 feet wide. The level ground on both sides of river under paddy cultivation. Numerous villages amid clumps of bamboo and fruit trees. Population numerous and industrious Town of Manwyne on right bank of Taping river is surrounded by a low wall. Population 700. District contains 6,000.

ROUTE No 8—contd
From Bhamo to Momein—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
7 Sanda or Taanda.			Mountain stream flowing into Taping (bridged)	<p>Route lies in north-east direction along the undulating right bank of Taping. Road making only attempted at intervals, but track though narrow tolerable across mountain streams flowing into Taping by substantial granite bridges. At distance of one mile from Maun-ye pass village of Onhu or Nyoun-ghu belonging to the chi of Manbu.</p> <p>Half way between Maun-ye and Sanda, road passes through Karu hokah the chief Chinese market town in the valley. The bazaar is a mere broad road flanked by Chinese shops on either side.</p> <p>From here the road leaves for a time its mid valley course turns northward, and continues so as far as Sanda. The town of Sanda or (as in map) Santa fu is poor and insignificant. It occupies the end of a ridge in a northerly bend of the valley a mile and a half from the Taping. The remains of a thick loop-holed wall enclose an irregular square about 600 yards in extent, on which are scattered 800 or 1,000 houses with a population of 4,000 or 5,000.</p> <p>Length of march, from morning till 5 p.m.</p>
8. Muangla		76	Nam Sanda (fordable)	<p>The road follows the embankment of paddy fields across the entrance to the high steep gien down which flows the Nam Sanda stream, which can be forded. A low red spur from the north-east range nearly meeting another from the opposite side here confines the Taping to a deep narrow channel and divides the valley into two basins one of Sanda and one of Muangla. Cross-spur and ford small stream. The Muangla valley is a repetition of that of Sanda, with the same direction and flanked by similar parallel heights until the head of the basin is reached.</p> <p>The valley as it were bifurcates down the northerly division the main stream of the Taping flows from the north-east through a steep valley shut off from the Muangla town by an intervening range of grassy hills. A large affluent, called the Taho or Sen-cha-ho comes from east north-east between the high hills which appear to bound the valley in front, but opening further on enclose the valley of Nantun. Numerous villages were found. Near the head of the valley the Taping even now 100 yards wide runs nearly across it from one side to the other. Ford at the village of Tamaun. Crossing a slightly elevated flat Peninsula on the left bank (and above the junction of the rivers) covered with villages, the road is crossed by the Taho flowing in broken streams in an old channel, a mile wide, between lofty banks. A great portion of level ground is covered with rice-fields across channel and ascend old river bank to Muangla, or Myalia, nearly 80 miles from Bhamo, which stands on a high slope on the left bank of the Taping enclosed by a loop-holed brick wall 9 feet high with watch towers which overhang the walls at intervals.</p> <p>With the exception of the main bazaar street, the various roadways are mere lanes paved with boulders. It contains including Zinbarh about 1,200 houses. The population according to Anderson is 2,000, while Staden fixes it from 3,000 to 10,000.</p> <p>Length of march, from late in morning to 3 p.m.</p>
9 Nantun		109	Taping (fordable) Taho (fordable)	<p>Leaving Muangla cross the muddy flat of the Taho, where the valley contracts to a breadth of only 2 miles. Pass the village of Nah low thence proceed over undulating boggy ground; then descend about 65 feet to the bed of the Taho in a long oval basin covered with gravel and boulders and closed in on the sides by grassy hills. At</p>

ROUTE No 8—contd

From Bhamo to Momien—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total		
	Miles	Miles.		
9. Nantín— contd		109	Nantín River (ford)	<p>the head of the valley a slippery zigzag path led up the steep face of the great spur of the Mawphoo mountain. The sides of the parallel ranges, here a few hundred yards apart, were marked by large landslips. The path lay along one which formed a perpendicular precipice 500 feet above the Taho. From the summit a level path turning north-east led up to Mawphoo situated at the extremity of a high level basin marked by two terraces on the northern side with the Taho flowing lavishly in a deep cleft or ravine at the base of the southern hills. Mawphoo is insignificant both as a town and a fortification garrisoned by a few Panthacy soldiers. From this the road skirted the level ground of the valley but numerous deep watercourses presented frequent difficulties. There was evidence however in the paved roadway the numerous substantial stone bridges and the frequent ruins of villages that this must have been a considerable highway in peaceful times. At the end of this valley the road makes a rapid descent to the treeless valley of Nantín. At the foot of the descent the Taho which leaves the valley through a deep rocky gorge is spanned by an iron chain suspension bridge with massive stone buttresses and an arched gateway on either bank. The span is about 100 feet and planks laid across the chains covered with earth and straw serve as a roadway while one of the chains sweeps down from the top of the gateway to serve as a railing. A small circular fort on an eminence was garrisoned by a few men and guarded the bridge. Route continues along the right bank through Nantín valley to river which ford and reach Little Shan town of Muang tee or Myntee, 108 miles from Bhamo. A mile beyond is the small walled Chinese town of Nantín. By its position on a triangle of land between the Taho and a swift deep affluent with the hills rising close behind it, and forming the base line it completely commands the main road to Momien and Yunnan.</p>
10. Momien			Nam mine a large stream (ford) Taho (good stone bridge) Taho narrow and rapid (good stone bridge).	<p>From Nantín the valley is only a mile in width throughout its length of about 20 miles its sides are marked by two well defined river terraces.</p> <p>"These terraces close in at the head, while the deep ravine of the Mowphoo glen terminates it. This area is 1,000 feet above level of Bhamo. The hills to the east at the base of which the route lies, are rounded trap hills. Numerous watercourses scarp their sides channels strewn with granite boulders lava like masses of basalt, and large fragments of rock.</p> <p>Hills to north west much higher and well wooded; at 7 miles from Nantín are the famous hot springs. The stream is visible many a mile off and the water of Nammine, a rather large stream, is quite warm. The hill sides are covered with pines and the road runs through a belt of dense forest on the shoulder of a spur from the main range after a short descent the Taho is reached spanned by a broad parapetted bridge. As the roadway follows the course of the arch, it is difficult for ponies to keep their footing on the smooth slabs. The level plain is soon gained and a broad path paved with long slabs of granite leads over the eastern extremity of an extinct volcano, again to the Taho here again a narrow rapid stream spanned by a handsome stone bridge. Past the ruins of a large village. The Taho issues at this point from behind a high spur and the volcano through a very narrow gorge, and the road winds up the side of the spur and was laid with a double line of stone flags to facilitate the ascent. From the top there is a fine view of the circular valley from which the Taho issues below. A good broad road slightly ascending</p>

ROUTE No 8—*conold*From Bhamo to Momiën—*conold*

Names of Stages	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles.		
10 Momiën — <i>conold</i>				<p>over the grassy hills round a lofty hill crowned by a white pagoda. In front lies the valley of Momiën shut in on all sides by rounded hills, treeless, but covered with pasture.</p> <p>The hills seem to slope almost to the walls of the city in the centre. To the right rise the Doebay range beyond which lies the road to Tali fu and in the far distance the lofty Tayphan range running north and south. A long narrow valley stretching in a northerly direction marks the course of the Tafo from its source in the Sin-hai or Pal hai watershed 60 miles distant.</p> <p>The city of Momiën 5000 feet above the sea, shows from its plan and construction that it was built as a fortress. It occupies an area of 5 furlongs square enclosed by a strongly-built crenellated stone wall 25 feet high. Twenty yards from the walls a steep moat once surrounds the city but has degenerated into a broad puddle. The masonry is admirable.</p> <p>Inside the wall an earthen rampart, about 30 feet wide and 18 feet high serves as a battery and parade ground. There are no bastions but at intervals turrets rise from the rampart built of burnt bricks. The four gateways with substantial bridges spanning the moat, are lofty and well built.</p>

Route No 9

From—BHAMO (*via* the
Nanthahet Stream)
Territory—BURMA.

To—MOMIËN and TALAY

Authority—CAPTAIN STROVER (Mandalay Diary, 6th December 1871)

Names of Stages.	DISTANCE.		Rivers	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles		
BHAMO				
1 Twainbo	50			<p>The town of Mogoung is some distance up the creek of that name.</p> <p>First defile of Irrawaddy 43 miles long, practicable in dry weather in some parts 300 feet water. A few rocks (the Bashao, the Tain the Kirma) which could easily be removed, render the passage dangerous during the rains. Boats cannot pass in July owing to rush of water.</p> <p>A little above the Mogoung creek the Nanthabet creek enters the Irrawaddy from the north-east. Not very far from the mouth is the village or small town of Nanthabet, and this is the place from which a route passes across the hills winding round to the town of Ooson. Captain Strover thinks that steamers could navigate the Nanthabet creek quite up to the town.</p> <p>The good-sized and well fortified Panthay town of Ooson is situated on hilly land and contains some 600 fighting men Panthays and Chinese. From it roads branch off to Momiën and Talay. The road to the former place is said to be open, but there is a Chinese town, about one day's journey off containing about 1,000 people.</p> <p>There is a road direct from Thamee to Momiën. The journey to Ooson from Nanthabet if properly pursued should take seven or eight days. The road appears to pass Thamee (marked Samat on some maps).</p>
2 Nanthabet				

Route No 10

From—BRAMO

To—MUANG MAW OF MYNE-MOW

Territory—BURMA

Authority—DR. ANDERSON

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
BRAMO				
1 Manay	16			A Shan village under Burmese and Kachin protection. A regular rendezvous for all Kachins coming down to Sawady to trade.
2 Wurra-hone	21	37		Four miles from Manay pass the Kachin village of Kara, and 4 miles further Poeta, the chief Kara village. Two miles from this place the road enters the country of the Lenna Kachins, and 7 or 8 miles further is Wurra-hone a small village situated near the summit of a mountain the seat of the elder brother of the Paloungto chief. The Lenna tribe appear to be a very superior race of Kachins, their houses and manners evincing a higher degree of civilization than is found amongst the Kara or Lakour tribes.
3 Paloungto	7	43	Namwan (ford)	A village of 30 houses. A rough hill road for six miles to Namkai the largest Lenna village containing 40 houses, whence a road leads to Muang-wan and Hatha. Here the road passing through a part of the Lakour territory descended for 9 miles to Pankaw a small village lying at the foot of the hills on the right bank of the Namwan or Muang-wan river. From this point at which the Chinese frontier is crossed and the level valley of Shuay loe entered, Kwot-loon is only one mile distant.
4 Kwot-loon	16	58		
5 Muang mow or Myne-mow	24	82		Leaving Kwot loon the Namwan stream is crossed. The road taking a south-east direction, and ascending the right bank of the Shuay loe through an open level country after 24 miles enters the Shan town of Muang Mow. It is surrounded by a brick wall 16 feet high without bastions or embrasures, but backed by an earthwork. Four gates lead into the town, which occupies a square of about 300 yards and is inhabited by Shan Chinese. About 60 soldiers are quartered here.

Route No 11

From—BRAMO

To—THIEN-NER.

Territory—BURMA.

Authority—DR. CLEMENT WILLIAMS

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate.	Total.		
	Miles.	Miles.		
BRAMO				
1 Nama-pay				
2 Maing tay				

Route No 11—contd.

From Bhamo to Thien-nee—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles.	Miles.		
3 Pecta				
4. Wa-poong				
5. Pait-asi				
6 Ma-kow				
7 Nan-poung				
8. Nan ky				
9 Ma-koung				
10 Thien nee				

Route No 12

From—BHAMO

To—MUANG-WAN

Territory —BURMA

Authority —DR CLEMENT WILLIAMS

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total		
	Miles	Miles		
BHAMO FROM EAST GATE				
1 Loyin	6			<p>Leave Loyin and pass—</p> <p>1½ miles Manbong-mar-the; Nam-ee-gye-choung.</p> <p>1½ Momouk (south) at foot of hills.</p> <p>1½ on hills is Momouk a Kachin village</p> <p>There is another village of the same name 8 miles from Momouk on other side of stream.</p> <p>1 mile cross Nam-ee-gye-choung 18 feet broad, to Pima-yin Kachin.</p> <p>1½ miles Pin-koh Near this is the highest point of the ridge line which divides the territory</p> <p>Crossing this the Nam-the-choung flows towards Mowun</p> <p>2½ Nam the (Kachin)</p> <p>3 Mawun, Shan village.</p> <p>1½ Lay the.</p> <p>4 mile Houn-ee-maw, crossing the Mowun-choung by a bridge.</p> <p>1 Hwan-seng</p>

ROUTE No 12—*contd**From Bhamo to Muang-wan—contd*

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles.	Miles.		
1 Leyin— <i>contd</i>	6			<p>1 mile Sin hounng a bazaar village (every 5 days)</p> <p>1/2 Toon hein.</p> <p>1/2 Ley khan</p> <p>1/2 Homoung Half a mile on either side of road are Nong swan (Shan) and Wing-koot.</p> <p>1 Taw khounng</p> <p>1 1/2 miles Kawtin. North-east of this is Mawyne, a small stream intervening South of the road is Wync-mow with a large pagoda, and 2 1/2 miles north of it is Kaitin-ka, where there is a large bazaar held.</p> <p>2 " Namtoh.</p> <p>1/2 mile Muang-wan.</p>

Route No 13

*From—*KIANG-TUNG*To—*KIANG-HAI*Territory—*SHAN STATES*Authority—*CAPTAIN McLEOD

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles.	Miles.		
1 Kiang tung				Stockaded town in Eastern Shan provinces about latitude 21 15' and longitude 96° 50' About 1,900 feet above sea.
2 Muang khien	7 1/2			8. 35 E. The road runs through open country amongst low undulating hills falling to the northward.

ROUTE No 13—contd

From Kiang-tung to Kiang-hai—contd

Names of Stages	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
2 Muang khien —contd	7½			Pass some small villages and cross three or four inconsiderable streams. The village of Muang khien contains about 100 houses. There is not a tree of any sort about them. In the vicinity are fields of cotton.
3 Muang pak	16½	24		Direction S 15° E. The road at first leads over a level country through fields and old cotton plantations. Further on over low hills valleys and plains of grass, gradually falling to the northward to the foot of a high range of hills, repeatedly crossing the Mi khien and several other small streams. The ascent of the range is short, but very steep. Shortly after crossing the summit reach a sayat near which is a spring of water. Thence descend to Ban-ton luang a village of 18 houses. The remainder of the road winds along the foot of some low bare hills. Muang pak only contains six houses, but there are three or four other villages near at hand. Near the village are some fields.
4 Stockade No 1	9½	33½		Direction S 10° E. Road over low undulating hillocks covered with low grass (but no jungle) and valleys between them all well watered by streams, until it reaches a nice plain with two streams of water flowing through it at the foot of a high range of hills. It then ascends the hills sometimes very steeply and descends again a little on the further side to an old deserted stockade. There is little forage or water at this place.
5 Pat-chiang	6	39½	Mc nau a stream (ford)	Direction S E. Road descends to a good sized stream, the Mc nau flowing to the north and eastward, whither it crosses. It then ascends again very steeply till it reaches a forest of pines. Passing through this it becomes much more easy and continues to the summit of the range. Thence there is a very steep descent to a second old stockade on the shoulder of a hill similar to the last and only accessible in front owing to the steepness of the sides of the hill. From this place there is a road to Ka-kul village on the left. From this place the descent continues to the halting place which is at the junction of two hills, and very confined.
6 Sup-nium	13	52½	A small stream and the Mi mium.	Direction S 25° E. Ascend slightly at first. Mountains as high as this range, even if not higher to the southward and westward and only separated from it by a deep valley. Thence descend continually to an open space between the shoulders of two mountains where there is a spring which sometimes, however dries up. After reascending again for a short while commence a long descent of this steep range which is covered with jungle to the Mc-het. This is a stream 20 feet broad and 3 feet deep flowing rapidly over a stony bed from the westward to the eastward. There is no space for an camping on or near this on the high road but by going a short distance up the stream without crossing it there is an open plain of some size. Several ranges of hills are visible both to the west and east during the descent. From the Mc-het the road ascends a rather steep hill and after passing over it and crossing a stream five or six times and the Mi nium reaches the camping ground which is a plain at the junction of a small stream with the Mi-nium.
7 Hai tai	18	70½		Direction for first 6 miles S. 5° E. last 12 miles S. 5° W. The road at starting flowsed the Mi nium between hills and through small plains crossing it several times (the last time where it is largest its width was 20 feet and depth 1 foot) to its junction at the foot of the hills with the Mi pan a large stream, 60 feet wide which flows eastward, and in its turn joins the Mi-tai.

Route No 13—contd

From Kiang-tung to Kiang-ha—contd

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
7 Hai tai— contd.	18	70½	Mi-huak. Mi-on Mi huak (ford)	<p>Thence ascend for some distance up the bed of a small stream. After this the road as far as the summit, a short way is very steep and particularly difficult after rain. From the summit there is no view as it is surrounded by hills and jungle. From this point there is a low deep descent down a hillside with trees to the Mi huak and pass over a low hill covered with thick jungle recross the Mi-huak and enter an extensive plain.</p> <p>The road crosses this plain to the village of Hai tai, situated on the right bank of the Mi-on which it crossed beyond the village. Thence the road continues through a level valley occasionally with jungle but more generally open with long grass, and some swamps, but not bed with the Mi huak winding its way to the right. After crossing that stream which is 35 feet broad and 3 deep, and flows to the eastward to join the Me-hem, and close to it the Me-moe the village of Hai tai of ten houses, and the last belonging to Kiang-tung in this direction is reached. The valley is here about 3 miles in length. The ground between this and the Mi-huak was in 1887 considered neutral and might be occupied by either the Burmese or Siamese Siam, for no boundary had been marked out.</p>
8. Me-hem	12	82½	Mi-on 95 feet wide (ford)	<p>Direction S 10° E Country at first open. The road occasionally runs along the sides of the hills, but chiefly along the foot of two low ranges, whence numerous small muddy streams flow forming small and deep swamps, along which bamboo and rattan grow in luxuriance to a plain on the right bank of the Mi-on. This stream where the road crossed it is about 25 feet wide and 11 inches below the crossing the ordinary breadth above is only 20 feet by 1½ deep. A wing first or a bed of round stones to the southward and eastward. Beyond the Mi-on the road passes over a low hill well wooded and reaches the bank of the Me-hem, a stream about 40 feet wide and 3 deep.</p> <p>The Mi-on is the only stream worthy of mention crossed; the others are too small to mention. The road with the exception of the swampy places was tolerably good.</p>
9. Me-tai	18	100½	Me-hem, Me-ta-phoung, Me-tun.	<p>Direction S 25° E Cross the Me-hem and then over steep hills to the Me-ta-phoung which the path crosses, and after it the Me-tun a good sized stream flowing southward and eastward to join the Me-hem, and other streams several times. Path now commences a general ascent, broken by occasional descents, to an open plain on the Me-tun a good place for halting. Then reach a narrow gorge with steep and rocky hills and masses of rock closing it in on both sides. If the summits of these hills can be crossed, they would prove a barrier which no force could pass from Kiang-tung. Beyond this gorge there is a steepish ascent up a hill to a small open place. The road then descends over the slippery steep side of a hill into the valley of the Me-hem by whose side it gradually emerges into flat country sometimes wooded and sometimes open.</p> <p>The Me-tai stream, which is about 40 feet wide and 3 deep, flows eastward to join the Me-hem.</p>

Route No 13—*conold**From Kiang-lung to Kiang hai—conold*

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles	Miles		
10 Hue-kai	15	116½	Me-tai Mé maor Nam phu (ford) Nam ton nak	Direction S 6° W The road after crossing the Me-tai leads over plains of long grass and stunted trees, occasionally however with higher and thicker jungle and then over a little hilly ground before reaching the Hue-kai a small town. The road passes the ruins of an old town Muang ko. There is another old fort in a north-westerly direction distant 2½ days' journey called U pon. Beyond this a tank about 4 feet square, said to be unfathomable; the water good and contains quantities of fish. Soon after the road approaches a high and broken peak to within a quarter of a mile with low hills intervening. Beyond this it crossed the Mé-ma or Nam phu stream 20 feet wide flowing eastward, and directly after the Nam ton nak. From here a low range of hills is visible 7 or 8 miles to the east, with another range beyond distant about 30 miles in the direction of Kiang than. Subsequently crossed the Mé-lai 10 feet, and the Doe-ton. No hot springs near camping ground.
11. Hue luk	18	133½	Me-khan luang	Direction S 10° E Road over high ground, somewhat hilly with open jungle to the Nam phu, a stream 10 feet wide with high muddy banks covered with grass, but which during the rains must be covered with water. It discharges itself into the Mé-khan luang. Beyond this stream a road branches off to the north and eastward, and leads to the old town of U-pon now deserted. The road then approached to within a quarter of a mile of some low steep rocky hills with the peak a little to the northward. Thence proceeded through a flat country, but with the jungle thicker and sometimes of oak to the Mé-khan luang a stream about 40 feet broad and 3 feet deep flowing to the eastward. After crossing this stream it proceeded for a while along the low and sandy banks then leaving it crossed three or four small streams and reaches the Mé-khan oon, a small stream 15 feet wide and 1½ deep, flowing over a sandy bed to northward and eastward. On its left bank is a good place for camping. Road then traverses a plain with stunted trees on it. The last part of the journey is over low hills, with small swamps between them the country to the east consisting of narrow plains with high ground covered with large forest beyond them. Hue ink a small stream, with very high and steep banks, close to the last of the western range of hills. Road good throughout.
12 Kiang hai.	18	151½		Direction S. 10° W Road chiefly over plains with long grass and reeds with a greater number of swamps than usual. The plains are full of holes made by elephants' feet during wet season. Road occasionally over rising ground and low hills, with thick bamboo jungle in places. The plains had generally but a few stunted trees scattered over them. Road at first traversed some plains and after crossing some small streams reached left bank of the Mé-katon, 10 feet broad and 1½ deep. Crossing this it proceeded some way along right bank then left it and passed close to the side of an old village, Ban-myay Le marked by some palm trees. The country about here consists of fine large plains, with low hills bounding them to the westward, and increasing in height to the northward, with a remarkable peak called Doe-tan bearing N 15° W. Those to the eastward are low and 2 or 3 miles distant. After this it passes over two very long swamps, and then comes to a jheel, 4½ feet deep and very muddy difficult to cross. Beyond entered on an extensive plain of reeds and long grass, till reaching the Mé-khok which it crossed. On the other side stand the brick ruins of the fort of Kiang-hai formerly a place of great importance. The country is intersected throughout by pathways made by hunters. The high road is only better marked by many people having lately walked over it. A person not well acquainted with the roads would certainly lose his way from this to Kiamme in eleven marches. The intervening country is shown on the later maps as belonging to L'hai.

Route No 14

From—KIANG-TUNG

To—KIANG-HUNG

Territory —BURMA

Authority —CAPTAIN MCLEOD

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter- mediate Miles	Total Miles		
1 Ban pa-khang	9			<p><i>N.B.</i>—This route is not suited for elephants</p> <p>Direction $\nabla 10^{\circ}$ E The first part of route lay over fields, and then except in the immediate neighbourhood of two villages over grassy plains, with clumps of small bamboo and a few fine banyan trees here and there. Cross the Me-lap at the village of Ban phung over a good bridge. This stream is about 30 feet broad and 2 feet deep flowing from the hills to the south-east, and going to the northward through the plains, watering several surrounding villages. The plains afford pasture to numerous herds of fine black cattle and some ponies. Ban pa khang a village of 50 houses with some fields in vicinity but no trees. It is said no water can be obtained for miles after commencing the ascent of the hills near this.</p>
2 Ban tapin	18	24	Nam luc (ferry)	<p>Direction N 35 E Difficult route over high hills covered with forest trees, but little or no brush wood. Road very good and shady. At first the road went along the valley to the foot of the range, and commenced the ascent which was very steep and reached a sayat considered as a bullock stage; continued ascending and having passed over the highest point of this portion of the hills reached a second sayat situated on the sloping shoulder of two hills near some fine banyan trees again ascend and pass a fine pine forest on the summit of the second range.</p> <p>After this the road descends considerably but once more ascends to the top of a hill, where is another sayat. From this a regular descent commences, very steep in some places and continuous so to the Nam luc, which is crossed by a ferry boat to the village of Tapien, consisting of three Lawa houses. There are three or four small Lawa villages in the neighbourhood. Water easily obtainable at first two sayats but with more difficulty at the third. Many pathways between the first and second sayats leading to villages and cultivated spots on the sides of the hills. The Nam luc is about 160 feet broad and 4 feet deep with a rocky bed. It flows rapidly past in a north-east direction and joins the Me-lam.</p>
3. Mnang ma or Ban kap	16	40	Me-la-kung (ford) Me ma.	<p>Direction N E. The route at first passed over a low hill and then crossed the Me-la-kung stream about 10 feet wide. After going along its bank for a short distance it commenced to ascend the range of mountains, at the foot of which the Nam-luc flows. Having attained the summit it proceeds along the ridge for some distance and then commences to descend and reaches a plain (a good spot for camping on) with a small stream, the Me-lol flowing through it. From this the road follows the course of the stream at the foot of the hills which are partially cleared for cultivation. It then reaches another but smaller plain bounded on two sides by low hills with some fields, with cattle, gardens, and a few deserted houses. At the further extremity of the plain is the Me-ma, a stream 60 feet wide, flowing from the westward. It receives here the waters of the Me-lol, and takes a turn to the northward. The hills now recede diminishing in height to the northward, and the road runs through an open country. Having passed 8 or 9 villages, it crosses the Me-ma at the village of Ban kap, consisting of about 40 houses. Road tolerably wide and good throughout; it passed numerous cross roads leading to Lawa villages to</p>

ROUTE No 14—cont'd

From Kuang-tung to Kuang-kung—cont'd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total.		
	Miles.	Miles.		
3 Muang ma or Ban kap— cont'd.	16	40		westward and an hour and a half after leaving Tapin the road branched off to Kuang khing and Muang-ni. The valley in which Ban kap is situated is nearly all under cultivation. It contains some 20 villages of from 15 to 30 houses each. The houses are far superior to those of Kuang-tung. There are a good many artificial fish tanks. There is a road from this to Muang-kang running over hills, which are not high.
4. Talan	14	54	Nam mi. Me-ma (ford)	Direction N 40° E. Road very good. Continues along the valley of the Me-ma and passes several villages all watered by small streams from the hills. It then passes over a range of very low hills which close the valley to the northward and crosses the Nam mi which is the boundary between the Muang ma and the Muang-la districts a few minutes after. From this the road passes over low hills and through narrow valleys (the river gradually diminishing in height) and enters the valley and town of Muang-la. This valley is about 6 miles in length and 2 in breadth and the town contains about 35 houses, and at noon on the banks of the Me-ma. There are not so many villages in this valley as in the Ban kap valley. The baobab tree is frequently seen, and is of some size. Continue along valley and cross the Me-ma at a narrow gorge which encloses the valley (of Muang-la, beyond which is that in which Talan stands) and a little further on the town itself. Close where the road crosses the Me-ma a pagoda is erected in a conspicuous spot on the side of a hill to mark the boundary between the Kuang-tung and Kuang-kung territories. The town of Talan stands on the right bank of the Me-ma, a large stream from 180 to 320 feet broad and contains about 200 houses. In the vicinity are numerous villages with cultivation.
5 Muang phang	14	68	Me-lam 150 to 320 feet wide (Ferry but fordable higher up)	Direction W 60° E. Pass the skirts of the town and cross the Me-lam by the ferry. It is here about 13 feet deep but fordable a little distance above. Pass old fortifications and fort nearly opposite the town on the banks of the river. River very plain with some villages, and enters the jungle which is Talan district and a day's journey passed through the district and town of Muang-lai, and leaving it to the right with the fields and villages belonging to it, proceeds through a thin jungle with high trees and over a hilly ground and reached some old field and a good deal of open ground on the bank of the Nam Tann a stream about 10 feet wide flowing to the south west and eastward. From this the road ran over low undulating ground thickly wooded and reached another plain in which the village of Na ngoi is situated, and is the boundary on this side of the Muang-lai district. From this having passed over a high and open ground with plains to the north west and the village of Ban khun a good-sized place reached the Nam phang and Muang-phang a town of 60 houses situated like the other principal places in a valley with some villages round it. The hills surrounding it are higher than any near the road very good.
6. Muang ham	18½	86½		Direction first part 18½ miles N 65° E then N 30° E. After passing over a plain, the road gradually enters a thick jungle crosses the Nam-tan, a stream about 15 feet wide rushing rapidly over a strong bed. From this the ascent becomes very steep till nearly attaining the summit of the first range when it becomes more gradual the road running along the sides and tops of the hills with an occasional descent until it reaches two small streams, Nam hak. Thence it again ascends still more, and reaches the highest part of the route, but not of the hills by 300 or 400 feet. Here water boiled at 204° Fah and the latitude was 21° 47' 45" N.

ROUTE No 14—contd

From Kiang-tung to Kiang-hung—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
6. Muang ham —contd	18½	86½	Nam khai (bridged)	Now commence to descend, and soon the valley below comes in sight enclosed by high hills, except to the northward and eastward, where they are low. The valley is 7 miles long by 2 broad and is said to contain 30 villages some of them large. After reaching the valley and crossing the Nam khai arrive at Muang ham, a town of 300 houses, on both banks of the river. The road is very good throughout, and the hills all thickly covered with jungle.
7 Muang hai	10	96½	Me-ham.	Direction N 30° E. Having crossed the Nam-khai about 70 feet wide, flowing to the westward by a bridge and shortly after the Me-ham and passed over plains and fields belonging to the town of Muang-ham and some villages, crossed over a high range of well wooded hills and reached the valley of Muang hai. The road then runs along the foot of the eastern hills forming the valley and having passed three or four villages, entered the town of Muang hai. A great many villages scattered over the plains. The town contains about 180 houses. It has 13 villages attached to it, and the valley is watered by the Me-ha, over which several bridges are thrown to facilitate the communication with the villages on the opposite or western side of the valley.
8 Me-ha	21	117½	Meha (bridged) Nam tsaw and Meha.	Direction for first 4½ miles N 40° E then N 80° E. The first part of the march is along the foot of the hills, enclosing the valley to the westward and the sides of which are laid out in tea plantations. On reaching the level plain cross the Meha, 120 feet wide over a good wooden bridge at the village of Nandon occupied entirely by Chinese. Following the course of the Meha, the road gets gradually amongst the hills. These are high and occasionally rocky and steep. There are however loftier ranges on both sides of the route. Cross many streams, but only two of any size the Nam-tsaw and the Meha. Only one good halting place along the road, not too confined, on the left bank of the Meha. The hills are covered with a thick jungle. Occasional Lawa houses on heights, and traces of Lompha cultivation.
9 Kiang hung	14½	131½		Direction for first 9 miles N 75° E next 3 miles N 87° E last ½ miles S. 40° E. The country continues the same as that passed on the last stage, but losing somewhat of its bare appearance although there are some steep ascents. The descent is greater throughout, the road running along the side of the river. This dashes its way down over a rocky bed with considerable force its breadth varying from 80 to 200 feet the banks occasionally very steep. Pass by the village of Ban long tung on the right bank of the Meha, at the entrance of a valley. From this the road runs through fields and an open country with numerous villages, some also on the sides of the hills, enclosing the valley. It then enters the large village of Kiang lung. Close to it is the old and nearly deserted fort of the same name on the right hand of the Me-khong. After leaving it pass through gardens planted with tobacco, bamboos and sugar cane, and again reached the left bank of the Meha, where there is a long bridge about ½ of a mile from the town of Kiang-hung which is visible from here. The breadth of the Meha in March is 130 feet and depth 5 feet, but during rains it is 110 feet with steep banks. The town which is of no size, stands on the western face of a range of hills running north and south in front of it. The Meha joins the Me-khong and during the rains these

Route No 14—*conold*From Kiang-tung to Kiang-hung—*conold*

Names of Stages	DISTANCE		Rivers.	Remarks
	<i>Inter-mediate</i>	<i>Total.</i>		
	Miles	Miles		
9 Kiang hung — <i>conold</i>	14½	131½		<p>united waters form an extensive sheet. In the dry weather the streams are much contracted and only a plain of sand meets the eye.</p> <p>The place is not fortified. There is only one wide road running from one end of it to the other and along this are a great many houses belonging to the Chinese very poor in their appearance. The streets are narrow, scarcely better than pathways, running up the sides of the hills without any regularity and along which terraces have been cut to admit of houses being built. The palace is a conspicuous building standing on the high ground, at the foot of the hills, at the northern extremity of the town. There are two or three monasteries and some small pagodas on the face of the hills and a few banyans here and there. With the exception of the valley of Meha, the country round is hilly and extremely barren in appearance.</p> <p>The Mekhong or Great Cambodia river passes to the north of the town. Coming from the north west it flows on to the eastward. Its bed is narrower here than higher up being confined on both banks by hills. It is crossed by a ferry within sight of the town, and the road to the Chinese frontier which strikes off at the village of Kiang-Lan, is seen winding over the hills to the northward.</p> <p>Kiang-tung was formerly the residence of the Taoism, and it was also called Kiang hung. The site of the capital was changed to its present locality by the late Taoism after he became firmly fixed in the chieftainship.</p>

Route No 15

From—LAY-DEA MYO

To—HLINE-DET

Territory—BURMA

Authority—WATSON and FEDDEN

Names of Stages	DISTANCE		Rivers.	Remarks.
	<i>Inter-mediate</i>	<i>Total</i>		
	Miles.	Miles		
LAY DEA OR LAY DEA MYO		"		<p>The town of Lay-dea is situated towards the middle of an enormous plain that runs nearly north and south. Like many other of the large towns in the Shan states it was formerly of much greater importance, but now it barely comprises 200 houses. The main road through the town is very broad and nearly half a mile long. It runs east and west with cross-roads at either end. The houses are small and low with small enclosures round them. The town is enclosed by an embankment on the north side, and a moat on the south. A stream runs along the west side and a large tank bounds the east. No houses are seen from the outside, the town being completely shut in by thick clusters of bamboo.</p>

ROUTE No 15—cont'd

From Lay-dea-myo to Hlwa-det—cont'd

Names of Stages.	DISTANCE		Rivers	Remarks.
	<i>Inter-mediate</i>	<i>Total</i>		
	Miles.	Miles.		
1 Kantom	12			Road passes through densely populated country and the Ledea valley thence ascending crosses a low range of hills. It then takes a westerly direction for about 5 miles and enters the Kantom plain, where lies the village of Kantom.
2 Maichinoo	10	22		Leaving the valley the road wound round the scarped sides of the hills for some 8 miles. It was, however, very well laid out, avoiding all great declivities. For the last miles it gradually descended. Maichinoo is a halting place surrounded by high hills on all sides. Water is very scarce and is obtained from a small spring about ½ mile distant.
3 Nattit	5	27		Road ascends for 3 miles and after a very steep hill follows the right bank of the Phoo-choung for about 3 miles. The stream joins the Salween a few miles above Kanyaphoo in Karenee after another mile it enters Nattit. The altitude of Nattit is 3,300 above sea level. Thence to Hlwa-det.

Route No 16

From—LAY-DEA-MYO

To—TA-CAW FERRY

Territory—BURMA

Authority—WATSON and FEDDEN

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter-mediate</i>	<i>Total.</i>		
	Miles	Miles		
1 Pashee	16		Mang khang	Road excellent for carts, over a great common and gently undulating downs. At 3 miles cross the Mang-khang stream that runs into the Bur Choung.
2 Bannin	14	30		Road excellent at first. It ascends a scarp to another great spread of undulating country devoid of jungle. Bannin is the second largest town in the Minsong district. Here there is a large bazaar. Three main roads meet here from Mine-oung, Mine-khan and Lay-dea-myo. Cultivation all about most extensive, and villages numerous. A fine stream of water passes through bazaar where one may camp.
3 Thaimon	12	42		Road excellent. Ascends again at starting another scarp and 4 or 5 miles further rises and winds among cliffs and rock isolated bluffs of limestone. Having passed this somewhat hilly ground the road begins to descend, after a while steeply, latter part being through thick jungle till the narrow valley of the Nam pan is reached. Thaimon is a small village. Water about half a mile distant.

ROUTE No 16—*contd**From Lay-dea-myo to Ta-caw Ferry—contd*

Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
4 Kong hai	13			By the valley of the Nampun of the Bur Khyoung which here varies between 300 yards and half a mile, the stream running very slowly between low banks and islands covered with trees and jungle and being very shallow in places. About a quarter of a mile higher up the channel is greatly contracted and there is a waterfall below these are said to be a great number of rapids. The road good the whole distance. Passed numerous villages on the road the largest of which is Likhan.
5 Pinner	12	67		Road good. Three hills with steep slopes are crossed. At 8 miles pass the large village of Kahoal and then reach the large village of Pinner in the Monal district, separated from that of the Mine-ung districts by a large stream.
6 Ta-caw Ferry	10	77		Direction E Pass two villages and again ascend slightly. At end of march a steep descent of over 2,000 feet from brow of mountain to Salween river. The east slopes of range are covered with dense forest jungle but the western slopes are mostly cleared and cultivated. During the height of the rains it is possible to go down, from here on raft to Dabquintake about 80 miles, above the Hai-gyre. The river is also employed for purposes of descent from Soakat ferry to Ta-caw. There is said to be an equally good road from Lay-dea-myo old Mine-ung to Mine-shoo.

Route No 17

From—MAKHOOM (in ASSAM)*To*—HOOKONG VALLEY (by Burmese route)*Territory*—BURMA and ASSAM*Authority*—H L JENKINS, Esq, 1899

Names of Stages	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
MAKHOOM				With the view of satisfying himself as to the practicability of opening out the old Burmese route from Assam into Upper Burma, Mr Jenkins undertook this journey across the Patkoi range.

Route No 17—contd

From Mahkoom to Hookong Valley—contd

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles	Miles		
Mahkoom— contd	---	---		On the 15th December left Mahkoom. There is no road eastward or southwards beyond this point except the natural bed of the Dehing river. It is necessary to cross the river at every bend. This is not difficult at this time of the year. There is not more than two or three feet of water at the outside.
Teraph (river)				Encamped at night at the mouth of the Teraph river.
Kerrenpani (river)				16th.—Continued to travel up the bed of the Dehing river and camped at night at a small Singpho village a short distance below the Kerrenpani an affluent of the No-Dehing river.
Bessa				17th.—Reached the New Bessa of the maps. Bunks, the most influential chief of the Asam Singphos lives here.
Dionpani stream				18th.—Camped at night at the mouth of the Dionpani another affluent of the No-Dehing.
Namchik				19th.—Continued up the Dehing and camped at night at the mouth of the Namchik river.
Namroop (stream)				20th.—Above the confluence of the Dehing and Namchik the main river is called the Namroop.
Sungkaph Purbui.				This day travelled up the Namroop, and camped a little below Sungkaph Purbui.
Namgoi				21st.—Continued up the Namroop which here runs through a narrow gorge between Sungkaph boom and Mitinkoo. Camped at the mouth of a small stream called Namgoi.
Nam phook			Namroop covers and rachim	22nd.—Marched up the Namroop to Nam-phook village, which consists of 8 Singpho houses.
Namroop (river)				23rd.—Leave Nam phook village. Course due south, across the Namroop over some hilly land 200 feet higher than the bed of the river covered with forest. After 3 hours again strikes the Namroop, and wade up its stream till evening leaving the bed of the stream now and then at the bends of the river in order to keep as straight a course as possible. Both banks of the river are covered with a forest of immense timber trees, and underneath the larger trees was a rank growth of jungle through which we could not have made our way except for the tracks of wild elephants. One could walk along these tracks and a little cutting of the creeping and climbing plants made it passable for ponies; but they were neither high nor broad enough to admit of elephants passing with their loads. The Namroop was for the most part shallow but occasionally we came on deep pools of very clear water. The quantity of fish in these pools is astonishing. The Singphos spear them. Camped at night on the banks of Namroop.

ROUTE No 17—contd

From Makhoom to Hookong Valley—contd

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
Namroop (river)				25th.—Continued march up Namroop much in same manner as previous day. Converse south. Till reaching mouth of a small stream called the Nambong, wade up it to the mouth of a still smaller stream called the Nunkee. Travelled up this and encamped on its banks. Country during first part of march undulating and gradually became hilly. The principal rock was a soft blue slate.
Nambong (stream)				26th.—Continued to wade up the Nunkee. The bed composed of large round alpping boulders. After an hour leave the stream and commence the ascent of the Patkoi by a narrow and not very well marked path. The ascent is not steep, and the ponies had no difficulty except where a fallen tree obstructed the road. The path was very nearly straight, and there was hardly any attempt to lessen its steepness by altering the direction. As we ascended the forest trees improve in size and the undergrowth becomes less thick. On the summit is a good deep soil covered with bamboo, cane and forest trees.
Nunkee (stream)				There seems to be a depression in the Patkoi range at this point and it is to be supposed that the Burmese would not have selected this for their main route to Assam unless it had possessed considerable advantages over every other path. The present path rises to about 2,500 or 3,000 feet; but to cross the range with a road it would not be necessary to rise more than 2,000 feet. From the summit a clear view was obtained of the country to the south, which on the Assam side was enveloped in heavy fog. The most striking object was a large open plain on the Burmese side some 18 or 20 miles long by 7 or 8 broad. At the western end of the plain and almost immediately beneath the Patkoi is an open sheet of water perhaps 3 miles long and 1 broad, called Nougang by the Singphos. It contains a triangular shaped island near its south-east extremity where its waters are drained off by a small stream called Loglai, which running south falls into the Sooroong which latter falls into the Chindwin.
Loglai (stream)				The nearest of the Hookong villages are on the banks of the Sooroong lying under a hill called Uadak, which appears to be 75 miles south as the crow flies, of Nony ang.
Sooroong (river)				The villages on the Sooroong are said not to number more than 15 houses, and very little rice is procurable.
Gadak (hill)				From these villages to the Denai is a two days' journey through the forest.
Denai or Chin dwm.				The country on each bank of the Denai is well cultivated and thickly populated. From the Patkoi to the Denai the path did not lie over any steep hills. Mr. Jenkins did not proceed further on this occasion. He makes the following remarks on the route so far:—The difficulties to be encountered on the road between Assam and Hookong are principally caused by the denseness of the jungle. The intervening country is a wilderness of forest containing many useful timber trees of immense size. Below the larger trees is a tangled mass of smaller plants most of them climbers twisting about the larger trees. The only paths by which man can move are the natural beds of rivers or mountain streams. It would be impossible to leave these channels except for the tracks made in the jungle by herds of wild elephants. The Burmese Government in former days took care there should be a village or military settlement every 12 or 15 miles along the route, and it was the business of the people stationed here to cut the jungle

Route No 17—*conold*From Makhoon to Hookong Valley—*conold*

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles		
Dena or Chin dwin— <i>conold</i>				occasionally and to remove fallen and other obstructions from the path. The route has now alien almost entirely into diuac, owing to the posts having been one by one deserted in August last. Only three trading parties have come this way from Hookong into Assam. Trad are now usually travel by a more circuitous and very difficult path through the Naga hills, passing from one Naga village to another so as to obtain supplies. It is to be wondered at that the Namroop route should be used at all by traders, considering that each man must carry 15 lbs. weight of rice for his own consumption on the journey besides his load of goods but the Moo-looke Singphoo, and Doonannahs are not hillmen, and to avoid climbing the steep scarps, which the Patkol presents at every other point, they form depôts of provisions along this route. They carry forward rice and bury it at convenient intervals along the road and then return for their loads. What is wanted is about 90 miles of road between Makhoon and the Chandwin

Route No 18

From—MAKHOON (in ASSAM)

To—HOOKONG VALLEY

Territory—BURMA and ASSAM

Authority—

Names of Stages	DISTANCE		Rivers	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles		
Sadya				By this pass the Burmese army under Maha Thilwa in 1818 and under Maha Bandoola in 1823 advanced and conquered Assam
1. Beesa	40			The total distance from Sadya to the summit of the pass is about 90 miles of which 40 (the space between Sadya and Beesa) pass over a tract of level and fertile country. The Nua-Dehing which skirts the road nearly the whole way affords a convenient line of water communication.
2. Namroop-nala	16	56		On the banks of this nala is good camping ground. On leaving this cross the Tonlook and Nannan ranges of hills, neither of which present difficulties which could not be easily overcome. The Namroop flows between these hills and the Nannan falls into it a short distance from the second encampment. There is little jungle in the vicinity of the camping ground and space for a considerable body of troops.

Route No 18—contd

From Makhoom to Hookong Valley—contd

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter-mediate.	Total		
	Miles	Miles.		
3 Camp	12	68		After leaving Nannan cross a low hill and reaching the Namroop again travel over its bed for five miles. This part of the route is the worst, as the bed of the nala is covered with large stones and rocks. The Burmans appear to have avoided this by cutting paths through the forest above. Camp on banks of Kasia nala.
4. Camp on Kasia nala.	7	75		From the Kasia nala to the summit of the Pat-ko! central ridge is about four miles and the ascent is said to be very precipitous but it is evident from the manner in which the Burmans travelled that there are no serious obstacles that a few pioneers could not readily overcome.
5 Loglai nala				The Loglai is one long march. The water-supply on this march is bad.
6				
7				
8				1. The Loglai is the first nala on the southern slope of the hills.
9				
10				From Loglai to Old Beesa-gaum is six marches, neither long nor difficult.
11				
12 Old Beesa-Gaum.				Old Beesa-gaum is called by the Burmans Beeganonoo Yoowa. It is thinly inhabited by Singphos.
20 Mogoun,				From Beesa to Mogoun there are eight marches which pass over a fertile, populous and well cultivated country.

Route No 19

From—MANDALAY
Territory—BURMA

To—AVA
Authority—MAJOR MACNEILL

Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total.		
	Miles.	Miles.		
	24			Leaving the city by the southern road after arriving at the south west corner of ditch, proceed west for three blocks, when the Kuladan road is reached. Then turn south. This road is 100 feet wide and passable, though very rough in places. The drains are badly bridged and most of these bridges have holes in them, which are very dangerous to riders. The street is lined with houses on both sides, which for the first 9 blocks are nearly all pukka. At 24 miles cross canal by a strong teakwood bridge. This is rather out of repair as the wheels of passing carts have cut ruts in the wooden flooring.

Route No 12—contd

From Mandalay to Ava—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
	1	2 1/2		<p>From the canal a broad straight road lies ahead for nearly half a mile. On either side are wood and bamboo huts, and the road is obstructed in many places by logs of wood thrown across the side of the road. At the end of this stretch is a large white pagoda enclosed in a wall, and before reaching it a large walled kyong is passed on the east side and some Chinese shops on the west. The pagoda lies right across the road which now turns east and west.</p> <p>The western branch follows the pagoda wall for a short distance and then turning south runs along the Shway ta-choung and swamp. This road runs along the edge of the choung and swamp as far as Tajaywa village. The eastern leads direct to the Arakan pagoda, and a mass of kyoungs and other pagodas. The road turns south round the white pagoda and between the Arakan pagoda and it.</p> <p>The road now again runs straight and nearly south. Several walled pagodas are on the east side and to the west are a number of bamboo huts where live some marble-cutters.</p>
		3		<p>A little beyond this, about 300 yards from the white pagoda a road leads east and west. To the east is the Gobway pagoda and kyoungs and to west a large pagoda in a line of trees. Four hundred yards from the cross roads a small sala is crossed. The bridge spanning it is small and narrow and not very good. The road here is bad and narrow and is lined with bushes and jungle.</p> <p>Three hundred yards further on a brick causeway commences and continues for about 350 yards further. At the end is a zayat on the west side. On the east side bushes near the road and beyond them dry cultivation.</p> <p>Two hundred yards further on is a large walled pagoda on the west side and trees and bushes to east. A little further on a well zayat and a few huts to west and some open ground well sheltered with trees to east. This would make a nice camping ground for a small party. Cross roads branch off here to east and west and the road bends a little to west of south. After passing the zayat the road becomes wide and good, and at 200 yards a well is passed on the west side. The traveller now notices that the soil of the road is quite black, and small black heaps are freely scattered over it. This is the debris of the brass foundry furnace and 100 yards further on we enter the village. It extends about 300 yards along both sides of the road but chiefly to the east and at the southern extremity is a well on the west side. From this point there is a straight stretch of road up to the embankment, and the distance is about 100 yards.</p> <p>After the first hundred yards a bazaar is reached, which occupies both sides of the road for about 100 yards. East of this is a kyoungs and detached huts and trees emerging from the bazaar a walled kyoungs appears on the west beyond which is dry cultivation.</p>
Embankment	3	6		<p>On the east is also dry cultivation, beyond a strip of open grass land which borders the road. This part of the road is very good. There is a police station on the west side near the embankment. After passing the embankment, the road turns to west, and continues between the ditch and embankment until the western corner of the fort is reached. There are thus three routes leading to the Tajaywa creek. The best is the upper one. This passes</p>

Route No 19—concls
From Mandalay to Ava—concl'd

Names of Stages.	Distance.		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
				<p>through the village of Taw-jee. On the east is the main road from Annapoora to Ava, which passes through the modern city of Amarapura. It is shaded with trees. On the west is a piece of grass land in the middle of which is some water. This is from one to two hundred yards wide. There is plenty of shade along this road up to the Tajaywa creek. Here a long and lofty bridge must be passed. It is usual built of teak and is pretty passable until the centre pier is reached. This is 20 feet across, and is bridged by only four planks loosely laid on. The centre of the bridge is quite forty feet above the water. After crossing this bridge the road enters a village situated in a fine grove of trees. There is a bazaar here where all kinds of knickknacks are sold. This grove continues for more than half a mile, and on emerging from it, we see to the south and south-east an apparently bottomless plain. It is of low, coarse thickening grass. On the west for some distance this grass extends and then a stream runs from the Tajaywa creek. There is a considerable amount of swamp on both sides of it. To the west of this is the riverbank well wooded with trees. This swamp becomes a small lake further south with plenty of various kinds of water fowls on it.</p>
			Cross small stream	<p>A chong is now crossed and the road continues along the bank for some way. The same grassy plain continues to the south and south-east with here and there clumps of trees, giving it a park like appearance. On the river bank to the west are trees and villages.</p>
Shway pay yet Pagoda.	4	10		<p>This is on the west side of the road. The platform is 75 feet above the road and measures 4 x 12 yards. West of this is another pagoda on a rock situated exactly opposite to the pagoda. The hill is covered with pagodas. The road continues to south and is here very bad. On the west side are trees and huts, and on the east the same open plain as before.</p>
Thabyadan redoubt	1 ¹	11 ¹		<p>About half a mile further on is the redoubt of Thabyadan. On the east side of it are some soldiers' huts, and there is a pathway leading from them over the rampart. From hence to Thabyadan village the road is bad. A chong has to be crossed a short distance from the fort. It is bridged. The country to east is open. To west are trees and houses. There is a brick road all the way from the redoubt to Thabyadan.</p>
Thabyadan village.	$\frac{1}{2}$	12		<p>This small village is on the banks of the Myit-ngay opposite to the city of Ava.</p>

* There is no ditch, but the ground in front (south side) is marshy. It can be easily approached from the rear.

Route No 20

From—MANDALAY

To—BHAMO (by the Irrawaddy River)

Territory —BURMA

Authority —DR. ANDERSON

Names of Stages	DISTANCE.		Rivers.	Remarks.
	Interme- diate.	Total		
	Miles	Miles		
MANDALAY				Capital of Burma, three miles from the river. A large suburb stretches inland from the shore. Beyond this a large flat of alluvial land devoted to rice-fields from which are raised three crops yearly. The river is perfectly navigable but in the dry season there are numerous sand banks, which often delay the journey. The population must exceed 100 000.
1 Mengoon				Passe Mengoon on the right bank after a few miles. This is a gigantic pagoda. The river is broken up into channels by large islands. The banks of the river present a succession of picturesque headlands 50 or 60 feet high separated by luxuriant dells each containing a village.
2 Shuen pagah				Between two such heights lay Shuen pagah a thriving town of some 400 houses. A brisk trade is here carried on in fish and firewood for the capital.
3 Ale-kyoung				The villages on the eastern bank seem small and few. A low alluvial flat extends to the low broken ranges of the Bagyun and Thunbyo-budo hills. The coarse skirts the lay island and town of Alek-kyoung till the rounded hill of Kehlung dotted with white pagodas rose over the dense greenery in which nestled the village so called.
4 Keh lung Htee-seeh				On the right bank is Htee-seeh, the village of oil merchants.
5 Makouk (R) and Twengoo (L)				Soon after the well wooded Hattoun abutted on the right bank in a pagoda-crowned headland with Makouk village at its base. On the opposite side the small town of Twengoo once fortified and still showing fragments of the old walls occupied another headland marking the entrance to the third defile of the Irrawaddy. From this point for 30 miles as far as Malay and Tsampengoo the country on either bank is hilly and covered to the water's edge with luxuriant forest.
6 Theebadaw Island				The stream 1 000 to 1 500 yards wide flows placid and unbroken. Here and there were fishing villages on the banks. The chief object of interest is the little rocky island of Theebadaw which boasts the only stone pagoda in Burma.
7 Thingadaw				Two miles above the island is Thingadaw a depot for the produce of coal mines.
8 Malay (R) and Tsampengoo (L)				The northern entrance of the defile is marked by two prominent headlands the western one crowned by the pagoda of Malay, and the eastern one by those of the old Shan town of Tsampengoo.

ROUTE No 20—contd

From Mandalay to Bhamo—contd

Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter-mediate.	Total		
	Miles.	Miles.		
9 Khyan Nyat				Malay contains about 800 houses and is the customs port for sailing boats bound from Bhamo to Mandalay and the centre of a considerable trade. Above Malay the river widens to a great breadth with numerous islands as far as Khyan Nyat. Thence it contracts to an unbroken stream, about 100 yards wide flowing for 22 miles between high, well-wooded banks.
10 Tamuhat and Tagoung and Old Pagan				Tamuhat, a little village to the south of a long promontory on which are the ruins of Tagoung and Old Pagan. Tagoung now only consists of a fishing village and 40 houses. The Shwey main toung hills on the right of western bank opposite Tagoung are very high and wooded to their summits. A few miles north they recede from the river when on the eastern bank the isolated range of Tagoung tommdaw about 30 miles long and 1,000 feet high runs almost parallel to the river in its intervening valley 6 miles wide. The Irrawaddy is here studded with large islands covered with long grass and forest trees. During the rains they are submerged and become dangerous to descending boats.
11 Thigyan and Myadoung				A serpentine course following the broad deep channel to the east of the large land of Chowkyoung leads to the town of Thigyan on the right bank, opposite to the village of Myadoung on the left. Monlet is about 30 miles north-east of Myadoung. Near this former town are the principal ruby mines of the kingdom.
12 Katha				Three miles above Myadoung and hidden by an island is the mouth of the Shweyler and some miles beyond it the village of Katha on right bank the next largest town to Taungpungo. It is a large town consisting of at least 50 well built timber houses, disposed in two parallel streets, and surrounded by bamboo paliades with three gates. Rice, cotton and tobacco are grown in the neighbourhood. A road leads from Katha north west past Manto and Tshett-me.
13 Shwee-goo-myo				Above Katha the river is broken up by large islands into various deep and narrow channels. Shwee-goo-myo is on the left bank.
14 Kanugloung				Pass the large island of Shweybew with its thousand pagodas. Three miles above this island is the entrance to the second defile where the Irrawaddy flows through a magnificent gorge, piercing a range of hills at right angles. For 5 miles the deep dark green current narrowed to 800 yards, but deepening 180 feet or more is overhung by gigantic precipices. Little fishing villages lie snugly in the hollows. Entering the defile, till round a many peaked hill on the left bank, which rises precipitously 400 feet, and farther on pass the Devalaced cliff, a limestone precipice which rises 800 feet from the water's edge. At the next turn of the river a pagoda marks the northern entrance of the defile, and close by the ancient mart of Kanugloung celebrated for the repulse of the Chinese invading army in 1769.

Route No 20—concl'd

From Mandalay to Bhamo—concl'd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles	Miles.		
15 Bhamo				<p>The river now spreads itself into a broad stream, broken up by islands and sandbanks and in some places not less than a mile and a half between the banks. In front of the village of Sawady a long stretch of sand was occupied by a large encampment of Shan Chinese and other traders a large fleet of boats lying ready to convey the goods down the river. Here Bhamo appeared in the distance situated on an elevated bank overlooking the river. To the right the high range of the Kakhyen hills was seen stretching away to the east-north-east and on the left a low range of undulating tree-clad hills bent round to join the western heights of the defile. The almost level sweep of country about 25 miles broad between these limits was closed in about 10 miles to the north by another low range marking the first defile of the Irrawaddy.</p> <p>Bhamo or Tching-gul (unknown by Chinese) is a narrow town little longer occupying a high prominence on the left bank of the Irrawaddy. It is surrounded by a stockade 9 feet high with a population of 2,500, occupying 500 houses, which form three principal streets. About a mile north the Taping river debouches into the Irrawaddy. During the dry season it is 150 to 200 yards wide and navigable only by boats, which convey a constant traffic between the Irrawaddy and Ta-tshan. During the rains, however, the Taping is at least 500 yards wide and navigable for small river steamers up to that place. Four miles above Shway-keua and the mouth of the Taping the Irrawaddy receives the waters of the Moky. It is a narrow stream rising in the Kakhyen hills, with a course of 90 miles, for 30 of which it is navigable during the rains and a small boat traffic exists chiefly for the conveyance of salt.</p>

Route No 21.

From—MAN-WYNE

To—BHAMO (by Hotha)

Territory—CHINA.

Authority—DR ANDERSON

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
MANWYNE				
1 Hotha			Taping in August 600 yards wide in dry season 150 to 200. Cross by boat.	From Manwyne to banks of Taping which cross in boats. On the other side a mud flat extends for 2 miles. Then follow the embankment of paddy fields for about 2 miles. Commence now to ascend the hills. A rough bridle path leads up a steep and very trying ascent. Pass several Kachyen villages. It is necessary to pay toll to the headmen. Having crossed the summit more than 5000 feet above the sea, the descent to the Hotha valley commences which is not more than 1000 feet below stretches out for 25 miles. From the village of Mentom an excellent paved road is carried along the end of the spurs and in many places cut out along the slopes. The mountain streams are crossed by means of granite bridges. Pass numerous villages and arrive at Hotha. This road is of 150 houses surrounded by a low wall. A path leads from Hotha to the town of Muangwan. A good road leads to the southern ridge of the Hotha valley which is crossed by a narrow tract. A steep declivity leads down another valley to Muangwan. About 6 miles from Hotha is Old Hotha or Taweyon a much larger place than the present town of that name. The road is paved with boulders and slabs of granite, and the stream spanned by stone bridges 20 to 3 feet in span with a row house at either end. A road is said to lead from Old Hotha to Muang-la reaching the Saidu valley by gorge of lower elevation and most gradual descent on the northern slope.
2 Namboke	14		Namso, (wooden bridge)	District very picturesque. The large and populous town of Latha is separated from the road by the Namso river. Cross the Namso by wooden bridge. Road passes through a mass of little conical grassy hills, which block up the western end of valley. It then turns to left from the narrow end of the Namso and gradually ascending follows the course of the Namboke stream and crossing a number of small hills attains the summit of the first pair of the easterly barrier of the valley. From this point to Namke the road winds over a succession of spurs till it reaches the village which lies on one of a group of little wooded hills, formed by the junction of the secondary Hotha range with the great northern barrier of the Taping valley which here unite.
3 Ashan	8	22		Road descends into a deep hollow and thence gradually ascends to the ridge of the main range bordering the Taping gorge, along which it leads to Ashan, 8 miles distant. A footpath, recently cleared of jungle, did duty for a road.
4 Muangwe			Namkhong	Leaving Ashan the path commences to descend in a southerly direction and then leads along the crest of a spur running down to the village. Steep declivities border the path. Having crossed the Namkhong the path lies over an alluvial flat into another valley and across another torrent. Then makes a steep ascent up the mountain side passing the village of Bama perched on a lofty rounded peak. A descent of a few hundred feet led to the village of Muangwe, on the southern slopes of a hill covered with trees and enormous granite boulders.

Route No 21—contd

From Man-woye to Bhamo—contd

Names of Stages	DISTANCE		Rivers	Remarks
	Inter- mediate	Total		
	Miles	Miles		
5 Loaylone			Muang kah stream 15 feet deep nulla.	Cross the Muang kah stream. The glen is very narrow but the rich black soil very fertile. The river is the boundary line between the Lakhone and Cowla Kakhyens. The only bridge is a felled tree. Ascend another ridge from the remains of an old Chinese fort commanding this route. A few hundred yards below the village of Loaylone occupies a steep slope stretching out in an amphitheatre. This is a large and thriving Kakhien village. The ordinary central route to Momiin is said to be from this place to Muangwan.
6. Hoetone	6 or 15	0		The direct road to Hoetone is only 6 miles by a comparatively level route, along the paddy field but by visiting Mattin it may be lengthened to 15 involving the ascent of one of the highest ranges. Descending from Loaylone to the glen the path made several steep ascents over a succession of spurs and descents into a shallow valley and at last reached the summit of the main ridge at an elevation of 5000 feet. The summit of the ridge is covered with fine turf and a few trees and strewn with enormous granitic boulders under the shelter of which were built the houses of a small village called Lawi ne. From this point descend the main pass of the Kakhien hills and shortly after reach Mattin. From Mattin a descent of 2 miles brings to Hoetone situated on a flattened depression of the same spur.
7 Namthabet river				In dry weather it is usual to travel from Hoetone to Bhamo by Mimonk across the plain but during the rains, when the low grounds on the left bank of the Taping are under water it is necessary to proceed to the Taping below its exit from the hill and descend in boats to Bhamo. A short distance below Hoetone the road divides. The lower is the direct one, the other turns off to the left and was a deep hollow toward another spur to the southward. From the brow of the spur there is an extensive view of the plains as far as the Irrawaddy. From thence descend through bamboo jungle. At 4,000 feet below Hoetone cross mountain torrent by bridge of bamboos with a boulder in centre. The level ground on either side of the stream was closed in by high hills. Crossing a low spur the path comes on the Taping river. About 2 miles further it leaves the Taping and turning to the south west and crossing a low spur comes upon the banks of a moderate sized stream the Namthabet, which flows into the Taping at its exit from the hill. Cross on raft. The Taping river is 5 miles further on. Cross in boats to village of Tsitgna which is a short distance below Taikaw. By boats down Taping river to Bhamo.
8 Tsitgna			Namthabet	
9 Bhamo			Taping	

Route No 22

From—MOULMEIN

To—BANGKOK (by the Three Pagodas Route)

Territory—SIAM, BRITISH BURMA

Authority—

Names of Stages.	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles.	Miles		
1 Natchgoung	40			Three days by boat up the Attaran river
2 Three Pagodas	80	120		Five days by land
3 Pongtreik				Three days
4. Bangkok		202		Two days by boat

Route No 23

From—MOULMEIN

To—BANGKOK (by the Three Pagodas Route)

Territory—SIAM, BRITISH BURMA

Authority—

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles.		
1 Khery-ong	60			By boat—20 hours (approximate)
2 Three Pagodas	98	158		Land—40 hours.
3. Wengka	28	186		Land—14 hours. Cross the Youssa mountains. Pass very easy and hardly deserving the name
4. Hta-ka-nom	42	228		Boat—14 hours.
5 Chugallee	52½	280½		Boat—17½ hours.
6. Kumboone	106½	387		Boat—36½ hours
7 Bangkok	122½	509½		Boat—40½ hours.

Route No 24

From—MOULMEIN*To*—BANGKOK*Territory*—SIAM, BRITISH
BURMA.*Authority*—Commissioner, Tenasserim
Division

Names of Stages	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles		
MOULMEIN				
1 Tavoy				By steamer—3 days.
2 Myecta				By land—3 days.
3 Amya				By small boat up Tenasserim river Several rapids. Travelling difficult—8 days.
4. Winmake				One day
5 Kamboorie				One day
6. Bangkok				Three days land; 2 canal.

Route No 25

From—MOULMEIN*To*—BANGKOK, SIAM (by boat and land)*Territory*—BRITISH BURMA and
SIAM*Authority*—

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>I ter- mediate.</i>	<i>Total</i>		
	Miles.	Miles.		
1. Kyaen			.	Three days by boat.
2. Kaw karat				One day by land.
3 Myawaddee			..	Two days by land.
4. Yahne			..	Three days by land.
5. Bangkok				Thirteen days by boat.

Route No 26

From—MOULMEIN

To—KIANG-TUNG

Territory—BRITISH BURMA, SIAM,
BURMA

Authority.—CAPTAIN McLEOD, 1887

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles		
1 Paik tsoung				By boat up the Lhaing-bue river for three days
2 Thoungyeen River				The Thoungyeen river forms the boundary separating Burma from the Siamese Shan States. Three or four days' journey
3 Main haut				Road runs north-east towards Labong. The country hitherto flat and slightly hilly now became mountainous, covered with thick forests. The village of Mainhaut at the foot of the mountains on the western bank of the Me-pin is seven days' journey from last stage.
4 La-bong				The road (following the course of Me-Pin through a well cultivated valley with numerous villages) reaches the town of La-bong five days' march. This place, the capital of a province is a walled town containing 2,500 inhabitants, and situated on the western bank of the Me-quan or the Me-wang river
5 Zimme				A few (about 10) miles north of Labong lies Zimme, a large double walled city on the western bank of the Me-pin. This place is in 16° 40' N lat. and about 99° 30' E long
6 Pak bong				Eight days' march through a hilly country with small valleys to the frontier village of Pak-bong belonging to the Siamese Shans.
7 Hai tai				From Pak bong the road runs along a level country till the village of Hai tai belonging to the province of Kiangtung a tributary to Ava. Intermediate country quite depopulated by constant wars.
8 Kiang tung				A walled town with a population of about 3 000. It is situated in 21 17' N lat. and 90° 40' E long. There are very high mountains between this place and Hai tai.

Route No 27

From—MOULMEIN

To—NOUNG-PALAY (in KARENNEE)

Territory—BURMA

Authority—

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles		
1. Pah poon				By boat up the Salween and Yonzaloon. In the rains there is sufficient water for boats of 5 tons, and the passage takes twelve days, the return journey being performed in two

Route No 27—contd

From Moulmein to Nong-palay—contd.

Names of Stages	Distance		Rivers	Remarks.
	Inter- stage mile	Total		
	Miles.	Miles.		
				In dry weather only 2-ton boats can be employed, and the time is 12 days up and from two to three down. The Yzalren is not navigable above Pah poun owing to rapid falls. Distance from Moulmein is rather more than 180 miles as the crow flies.
2 Sakaw gye	22			Up the left bank of the Yonzalren, crossing numerous tributaries.
3 Pay nay bin camp.	10	32		The road leaves the valley of the Yzalren and crosses a hill 1,111, 700 feet high. Descending into the other valley for a while on the rocky bed of the Pay nay bin stream and soon after reaches the camp of the same name.
4 Kaloodo (police fort)	12	44		Lead the road way down the valley of the Pay nay bin stream to the police fort which is situated on a steep hill at the foot of the sea. At the bottom of the hill at will the police fort is situated. The road is the western branch going to the gye and the northernly to Karsene.
5 Mavalaw stream.	11	55		For a short distance over undulating country and then into the valley of the Pah and Mavalaw streams finally descending to the bed of the latter.
6 Pha stream (Phoo in map)				Road passes over a hill 3,000 feet high to the Pha stream, which is 600 yards wide and forms the southern boundary of Karsene. The river valley is covered with eng forests. The soil is strong and there is very little undergrowth.
7 Pah zongg (stream)	22	77		The road in this marsh crosses the Nga kelay Kyun, and Karmyho stream. At the foot of the road branches off to Loomatoo and K. ukky or K. woyee. The width of the Nga stream is about 70 yards and that of the Kayma stream is about 150 yards. The country is dry, rocky, and undulating with here and there steep rocky places. The forest with which the country is principally clad. Between the Kaymaphoo and Pah-zongg stream there is a plateau some 2 miles wide covered with grass, bamboo, and large timber.
8 Htoo stream	17	94		The country passed over resembles that in first part of the route. The road runs parallel with the Htoo stream and crosses a road leading west to Toungoo. The country is on the Htoo stream, which is about 300 yards wide and blocked some distance above by huge rocks.

Route No 27—concl'd

From Moulmein to Nong-palay—concl'd

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
9 Nampay (stream)	16	110		Road through a country with occasional toungya hills and a remainder very long and covered with many small trees and grasses. Great are not to be observed in crossing the Nampay stream which is done 4 or 5 times during the march as it runs over hollow ground and fresh whirlpools are constantly forming.
10 Kyek pho- byoo.	14	124		The road ascends to the top of the Kyek pho-gyee hill which is 1500 feet high and on which there are a few fir trees. The whole country with the exception of a small forest in the stream is covered with a dense cultivation and there are no trees. The soil is black and the Kyek pho-gyee is richly cultivated and summer crops. Two crops of paddy are grown a year in the lower parts but the first which is sown in February and reaped in the May is not of good quality. The northern part of the mountain is a very good forest of timber. Elephant hides and horns are scarce.
11 Nong-palay	16	140		Distance in miles across cultivated plain. From here it is from 6 to 8 days to Mandalay.

Route No 28

From—MOULMEIN

To—ZIMMAY or CHING MAY (via Gyn and Houg chaw rivers and through Yuhne and valley of Meinam)

Territory—BRITISH BURMA

Authority—J CORYTON, Esq

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
1. Khayah				1st day—By boat up Gyn river
2. Meegalong				2nd day—Boat On left bank of Hougdraw river
3. Kyasin				3rd day—Boat In the dry season only small boats can pass from Meegalong to Kyasin, and the journey is

Route No 28—contd

From Moumeia to Zimay—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
3. Kyacau— contd.				about 8 miles byland to Kankareet (not to be confounded with Kankareet on the Salween)
4. Kankareet				4th day—Boat.
5. Toung-gya				5th day.—Land. There is a Sakkan between the hills.
6. Meawadee				6th day—Land. On the Thoungeen, the frontier. Here is a police station in a stockade
7. Mailamoung or Choung			Thounggeen	7th day—Boat. Along the Thoungeen
8. Batawring				8th day—Land. Cross the Thoungeen and reach Mailamoung Choung
9. Kyee-gya- tong				9th day—Land. From this point the road to Yahine or Yahing leads over the mountain range separating the watersheds of the Thoungeen and Missing streams.
10. Yahine or Yahang or Bahayng				10th day—Land. 11th—Land. Reach Yahine on the Meinam. From Yahine there are various routes to Zimme. The shorter route is through jungle, and is practicable only for strong parties. The other is by a branch of the Meinam, which proceeding in a north-east direction enables the traveller to pursue this journey in comparative tranquillity, the banks of the river being thickly peopled by peaceable Shans.
11. Zimay				It is possible to reach Labong and Zimme by water from Yahin. One of the Burmese headmen here tells me he has done so but that the river is so full of rocks and rapids that it took him exactly a month to perform the journey. From Labong to Zimme all accounts agree is only a morning's march. The second named journey from Yahine to Zimme, viz that by the banks of a branch of the Meinam, is ordinarily performed in 10 or 15 days.

Route No 29.

From—MOULMEIN

Territory—BRITISH BURMA.

To—ZIMMAY (old Salween and Yonzaleen rivers)

Authority—J CORYTON, Esq (letter to the Liverpool Chamber of Commerce, 1870)

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles	Miles		
1 Sampanago (R)				1st day—Boat Pass Mariaben (R. bank) and reach Sampanago (R. bank)
2 Kan bleik (L)				2nd day—Boat Pass the following villages:—Tongain (L) Pahleen (L) and Wenkyan (L) and reach Kanlik. A B—This would be a short journey with a flood tide Tongain could be easily reached on first day
3 Paan				3rd day—Boat Villages passed—Troklah (L), Pahgat (R) Kynegalay (R) Kamao-katsoen (L) and Pongbay (L) A B—Paan might be reached at end of second day if Tongain were reached on the first.
4. Shwaygaon				4th day—Boat Reach Shwaygaon. This is the last village of importance in British territory passed after leaving Moulmein From this point onwards Burmese is little spoken by the natives Huts are seen at intervals along the river bank Villages passed—Pahen (R) Monkahi (R), Mitaban (R) Mukrang (R) Marmal (L) Kanprain (R) Odung (L) Me-bong (R)
5. Kankareet				5th day—Boat Reach Kankareet. This village partly Karen and partly Burmese, is at the confluence of the Yonzaleen (up which the route passes) with the Salween. A large island, Kaunloon occupies the river just above Shwaygaon The river is navigable on either side of it If the eastern passage be selected, you pass in the course of the day Kanoo (L) and Kamamoung (L) Proceeding by the western channel you pass Myeng (R) Yeleagain (R) Wakyan (R) and Maxins (R)
6. Yayboo				6th day—Boat. Up the Yonzaleen river Pass one village Pahlee (R) There are no villages on the banks of the Yonzaleen. They are generally two or three miles inland. The Karens prefer to erect their houses on high ground, where they are less liable to fires than near the river
7 Kyathoung zeik				7th day—Boat.
8. Lartheephokenk				8th day—Boat
9 Wenpazek				9th day—Boat.
10. Paphoon or Paphoo.				10th day.—Boat Paphoon is the principal post in the extreme north of Tenasserim, and the head-quarters of an Assistant Commissioner. It contains from 40 to 50 houses.

ROUTE No 29—contd

From Moumsein to Zimmay—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
11 Maith yonk				11th day—Land. From Paphoon the course lies easterly. It takes two days to reach the Salween over hills 8000 ft high. Maith yonk is reached on the evening of the first. Some 20 villages are passed in the course on the day's march the general direction of which is east-north-east. There is no regular road.
12 Dahgwem zok	"			12th day—Land. Reach Dahgwemzok on the Salween. No villages on the line of this day's march.
13 Maithunkat				13th day—Land. Cross to the east bank of the Salween. No villages passed.
14 Whine-loon gyee				14th day—Land. Whine loon gyee is a town on the banks of a river of that name. It is the residence of a Shanese official who presides the working of the forests belonging to the chief of Zimmay.
15 Maizaleen				15th day—Land. Reach Maizaleen through or creek. The creek route has a population of about 600 people in three villages close to each other.
16 Maizalee-toe pout.				16th day—Land. The country hereabout is very hilly and sparsely populated.
17 Bawgee				17th day—Land. Bawgee a village of about 70 houses. The day's march is over level ground. N.B.—From Bawgee there is a route to Hoo Sakkan about 20 miles over a level ground. Thence on to Naulunk with 150 h uay and a Shanese guard. From this on to a Sakkan in the jungle Kunglaw and then on to Wangung on the Sakkan then on to Panmoung with 200 houses then on to Zimmay a short journey.
18 Camp				18th day—Land. This day's march ends in a bivouac there being no villages.
19 Soon tounng dat-paw				19th day—Land. The only village passed is Whinewoot.
20 Laignun (village)				20th day—Land. Six villages, names not known, are passed in this day's march.
21. Zimmay				21st day—Land. Seven villages, name not known, are passed during the day.

Route No 30

From—MOULMAIN

To—ZIMMAY

Territory —BRITISH BURMA, SIAM

Authority —J CORYTON, Esq (letter to the Liverpool Chamber of Commerce, 1870)

Names of Stages	Dist wcn		Rivers	Remarks
	Inter-mediate	Total		
	Miles	Miles		
1 Khayah				1st day —By boat up Gyne river Reach Khayah right bank of Gyne pass Samathat on left bank
2 Thayeng choung				2nd day —Boat
3. Hline-boay				3rd day —Boat The most important village on the Gyne It contains 200 houses
4. Tartsilee-queen				4th day —Boat and land.
5 Guttay				5th day —Land There is a guard house here
6 Yembine choung				6th day —Land At this point another route to Zimma joins this
7 Thoungeen (river).				7th day —Land Reach the Thoungeen river For a long distance from its confluence with the Salween the boundary between Siam and British territory road runs along one of the high natural cliffs between two parallel ranges. There is very little ascent or descent.
8. Shonpoen			Thoungeen	8th day —Land. Crossing the Thoungeen our road lies over undulating land until it reaches Shonpoen. No villages
9 Waho				9th day —Land
10 Samsuay				10th day —Land.
11 Kwen myong				11th day —Land.
12 Mai guan				12th day —Land A stream.
13 Mai guaw				13th day —Land A stream
14. Kapha				14th day —Land.
15. Mhine loon gher or Mhine-loon gyee				15th day —Land. A town on a stream of the same name.
16. Manzaeen				16th day —Land A creek There is a population here of about 600 people in three villages close to each other

Route No 30—*contd**From Moulmein to Zimmay—contd*

Names of Stages	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total.</i>		
	Miles	Miles		
17 Maizalee tee-toot.				17th day—Land.
20 Mohbounk				20th day—Land
21 Martway				21st day—Land
22 Kyonk tounng				22nd day—Land.
23 Kyonkway dwen				23rd day,—Land.
24. Zimmay				24th day—Land

Route No 31

*From—MEADAY**To—PAKHAN NGAY**Territory —BURMA**Author's/y —SNODGRASS*

Names of Stages	DISTANCE		Rivers	Remarks
	<i>I ter- mediate</i>	<i>Total</i>		
	Miles	Miles		
Meaday				The British army left Meaday on the 20th December. Two miles from this place the Bengal Commissariat failed in its supply of beef for the Europeans, so that division was halted until cattle could be collected from the surrounding country. On the 21st head-quarters with the Madras Division moved toward Moulmein. The road became hilly and very bad requiring the utmost labour of the Pioneer Corps to enable the march of six or eight miles per day
Longhee				Arrived here on the 28th. It is a pretty town on the bank of the Irrawaddy. Here there was great abundance of game

Route No 31—contd

From Meaday to Pakkan ngay—contd

Names of Stages	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles	Miles		
Camp below Melloon				The army encamped on the 26th about four miles below Melloon, where they were joined by the flotilla, and from which the enemy's entrenched camp could be observed. They had now advanced 140 miles from Proms without meeting an inhabitant along the once thickly peopled banks of the Irrawaddy or being able to procure on any supply from a country abounding in cattle so effectively had the enemy succeeded in laying waste the line of advance.
Patanago				On the 30th they marched to Patanago, a town directly opposite to Melloon. The Irrawaddy is here 800 yards broad. On the 25th January the army again advanced over the most barren and uninteresting country and by the worst roads that had yet been met with from Bangoon upwards.
Yay nan gyong				On the 31st headquarters arrived at Yay nan-gyong. Here there are extensive petroleum wells. Although the district is fertile in that useful commodity it is nevertheless almost barren in appearance, presenting scarcely a blade of grass or vegetation of any kind.
Pakkan ngay				On the 14th February the army reached Pakkan ngay, having passed Nanyang-gyong, where the road leading from Arakan reaches the Irrawaddy. NB—For continuation of route to Yan-da-bo see No 32 route.

Route No 32

From—MONAY

To—KIANG-TUNG

Territory—BURMA

Authority—DR RICHARDSON (on native information)

Names of Stages	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles	Miles		
1 Moung pank			May ting	Close to this place the May ting, a considerable stream is crossed.
2 Banloe				
3 Kan auk				

Route No 32—contd

From Monay to Kiang-tung—contd.

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total.		
	Miles	Miles		
4. May len			Been	
5 Thay kan				
6 Nalhay				
7 Kien loon				In this stage the Been, a pretty large stream, is crossed.
8 Ta-kan				Ferry over Salween.
9 Mienlon				Village
10 Thon monng				Ditto
11 Kentoon kyung				Ditto
12 Mein peen				
13 Ka-quae				
14. Tong ta- mein			Kiang tung territory	
15 Poo				
16. Lays lung				
17 Kiang tung				<p>The town of Kiang tung contains about 600 houses or 3000 inhabitants. The whole place has a miserable appearance. The palace stands in the centre of the town. To the south and west are low hills and swamps; this portion uninhabited. The roads to the north are narrow and the houses widely separated.</p> <p>The fort stand on high ground at the foot of the range of hills passed on the march. On the north west side are fields extending from 3 to 8 miles, bounded by high mountains. On the other side swamps and low hills. The wall on the southern face has been extended so as to make the circumference 3,000 yards.</p> <p>The wall which is about 15 feet high including the parapet, consists of a double wall of brick and mud about 2 feet thick with the space between them filled up with earth. In many places the rain has brought down portions of the wall but they were being repaired. The fort has 12 gates, 4 or 5 of which are on the eastern face but it has no bastions or embrasures for guns. The walls following the configuration of the ground present a most irregular appearance. Not a single piece of ordnance was visible. Swamps supply the place of a ditch, and when these do not exist a cutting has been made in some places to the depth of 30 feet from the foot of the wall through the hilly ground to a level with the swamps but no water enters. Finally its position is strong having the hills to the southward equally high if not commanding it.</p>

Route No. 33

From—MONPOO

To—MOOM-GHOM

Territory—BURMA

Authority—PEMBERTON

Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles.	Miles		
1 Surong				East by north
2 Keoo-ywa				
3 Menda				
4 Tingee				Half way commence ascent of hills, and halt at Tingee on the eastern slope
5 Raksa				
6 Phageh				
7 Moneh				
8 Tumansa			Meza Khiong	Soon after leaving Tumansa cross the Meza Khiong
9				
10 Moonghom				

Route No 34

From—MANIPUR

To—SUMJOK (on the Chin dwin River)

Territory—MANIPUR

Authority—R BROWN, Political Agent,
1869

Names of Stages	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
1 Thobal	12		Eumthai (bridged) Thobal (bridge or ferry)	Good road all the way Thobal is a large village on both banks of the Thobal river. Cross by bridge or ferry boat. River about 20 yards wide not fordable except in dryest season. Current slack. Good encamping ground. Water good. Ordinary provisions of the country and fish procurable.
2 Kaidok Pokpee, Than na.	10	22	Oungjug (frequently crossed) Among-thong (bridged)	Good road. Fine open country. Little wood. Cultivation less. Many small villages. Good camping ground, well elevated under Hoerak range of hills. Plenty of good clear water and fuel.

ROUTE No 34—contd

From Manipur to Sumjok—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total		
	Miles.	Miles		
3 Dowan Pok pee.	12	34	Lokchow (crossed in rains by swinging bridge)	On leaving camp Lokchow river crossed and hills entered. Steep ascent. No water or wood on road till camp is reached. Roads passable for elephants, but not for lad in ponies. Camping ground in rice clearing. Water not plentiful.
4. Kangsung	6	40	Lokchow (ford able in cold weather stream rapid but not wide rocky bed strong bridge of wood and bamboo)	Camping ground in rice-field. Water scarce but of good quality. Road better.
5 Yangow Pok pee.	7	47	Too-rang (a small river fordable at all seasons)	Frontier of Manipur and Burma. Last descent to plain very rough and steep. Thanna in an open jungle. Water and fuel plentiful. No provisions, except a little rice and fowls procurable.
6 Taap (Bur mese vil lage)	10	57	Turni and Muklung rivers (both fordable ex cept after heavy rains) Yangya, small river near camping place	To Taap. At foot of Ungching range of hills. Road good through grass jungle and open teak forests. Several small Burmese villages passed. Water good.
7 Sumjok on right bank of Ningthee (or Chind wen) river	18	75	Numkingneet (crossed by boat in rainy season)	This march is a very trying one. About 4 miles from camp the Ungching range of hills is entered and is where crossed totally destitute of water. This must be crossed and is about 8 miles of very rough and steep travelling. Six miles of good road through teak forest and scanty cultivation leads to Sumjok. Not—Sumjok is the residence of a semi-independent Rajah named after the village. He is also a Burmese official. The village of Sumjok contains about 1,500 or 2,000 inhabitants. Little trade—boat-building carried on. No fortification. Remains of old stockade in village and surrounding Rajah's house; river navigable. Current in cold weather moderate. Width about 800 yards. Village and river commanded by a height im- mediately south and overlooking river. Provisions apparently plenty; fish good and cheap. Small pox common. Number of Rajah's armed retainers about 400.

Route No 35

From—MYIN-GYAN

To—NYIN-GYAN

Territory —BURMA

Authority —W BOXALL, Esq, 1882

Names of Stages	DISTANCE		Rivers	Remarks
	<i>Inter mediate</i>	<i>Total</i>		
	Miles	Miles		
MYIN GYAN				<p>This is one of the most important towns on the Irrawaddy Mr Boxall arrived here in January and endeavoured to hire carts to proceed with him all the way to Nyin-gyan finding this impossible he hired carts to take him as far as Toung-tha, where he got carts with out any trouble Leaving Myin-gyan the road takes a south-easterly direction to Yay-zee two miles distant The road is very bad, and would in the rains be almost impassable</p>
			Small creek (80 yards wide always fordable)	About a mile from Myin-gyan pass a small creek about 60 yards wide always fordable the banks 18 feet high and steep. The country passed through is all cultivated
Yay-zee	1	2		
Sakka	3½	5½		
Yay-thit	1½	7		<p>Road bad and muddy much sticky and dries very hard The road lies through an open plain as far as can be seen. This is especially so in the wet weather In the rains many places would be impossible for any number of carts Yay-thit is a large village The water is supplied from three wells two nearly dry the other apparently very full the water bad and very little to be got</p>
Small village	1	8		<p>Leaving Yay-thit pass at one mile a small village of about a dozen houses From this point the road for about 2 miles is across cultivated land The fields come close up to the road which is narrow and in the wet weather must be heavy travelling From this point it passes over very stony and undulating ground and is so rough that a heavily laden cart would be in frequent danger of upsetting</p>
Nubhlen	3	11		<p>Nubhlen is a very large village surrounded by a stockade made of thorny bushes. They could be easily set on fire as they are very dry The road goes on the outside of the village The water-supply is from a well outside the village The water tastes brackish owing to a sort of tank being close by which at this time is half dry and would probably be quite dry in March.</p>
Chownee-ywa	4	15		<p>The road between Nubhlen and this place passes over a little cultivated with cotton seed and maize and is bad.</p>
Mebee-goo	4	19		<p>This village is on the bank of a small stream dry in February and never more than 2 feet deep its banks are steep and bottom sandy Crossing here you come to a place with several Paon-gyee huts, and beyond there are some half dozen houses. The road again enters the same stream, and lies in its bed for about half a mile and then reaches the first part of Toung-tha The road up the bank is narrow and only sufficient for one cart</p>

Route No 35—contd

From Myin-gyan to Nyaing-gyan—contd

Names of Stages	Distance		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
Toung tha	2	21		This is the head-quarters of a magistrate. There are great quantities of toddy palm grown around the town, and the people drink freely. The headman asked Mr. Boxall for some brandy and on his pouring some out in a wine glass suggested a tumbler. He was accordingly helped to a tumblerful which he drank with much apparent satisfaction. The town is stockaded with a hedge of thorns.
Chouk chan	3½	24½		Water from a well bad. Leaving Toung-tha the direction is south-west. The Myin-gyan hills are on the left and do not rise above 500 ft above the plain and are very dry. I saw a small village and then reach Nigouk chan. This village contains about 80 houses. The water-supply is bad.
Koola zway	1½	26		A small village of 20 houses on top of a small hill. From this place you can see a small sayat built on the top of a hill about half way between this and Chouk pone.
Chouk pone	4½	30½		A small village of about 20 miserable looking houses. A little to the west of this village in the valley are a few more houses which probably belong to it.
Koom bo-bie	2	32½		A miserable looking village of 7 or 8 houses. The road from Toung-tha to this place is very bad and in many places so narrow that there is only room for a single cart to pass at a time. It is frequently necessary to halt near such places while a line of carts are passing. Water is brought from a distance.
Zon zin	2	34½		Just before reaching Zon zin the road is a little better and a stream is crossed before entering the village. This stream is supplied from a large tank above it which appears to be artificially made as it is banded across. It seemed to be well supplied with water.
2 Paing 17½	4	38½		The road is good with the exception of one or two places which would be very bad in the rains. Paing is a moderately large village supplied with water from two wells. All are and it are great quantities of toddy palms. A good quantity of rice appears to be grown here.
Mah hne-myo	2	40½		This seems to be the great market for the surrounding country. Products such as cotton rice, oil seed, millet, are brought here. From three to four hundred carts were there the day that Mr. Boxall passed through. It is not a large place, but the woon of the district lives there. He is a very pleasant fellow. Water-supply good from several wells.
Poun-dee-dora	2	42½		Leaving Mah hne-myo a small tank is passed at the first quarter of a mile. This contains plenty of water for cattle, but would most likely be dry before the rains set in. Poun-dee-dora is left a little distance on the right.

* The road is a sandy gravel. Near all the villages the roads are hedged in.

ROUTE No 35—contd

From Myin-gyan to Myin-gyan—contd

Names of Stages	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles	Miles		
Puttan	1½	44		From thence to Puttan is about one and a half miles over a very bad low lying road across paddy fields.
Tumnee-gaan	2½	46½		Leaving Puttan you meet the bed of a small stream quite dry at this season. It runs and it is more than 2½ feet of water in it as at any time. The road is along the bed of this stream for about 200 yds and then follows the road that leads to Tumnee-gaan. This road is good the whole way. Just before reaching the village are two wells of water and a nice resting place under a big tamarind tree. This is a small village.
3 Thoom mor gyee	3	49½		About a quarter of a mile after leaving Tumnee-gaan you pass a river with the water from the river. The water is very good. The place is at full height and the water from three or four wells. The head man is a Thoo-mor.
Yemma-been	2	51½	Small stream	Leaving Thoom mor gyee cross a small stream with little water. It is a small stream. The water is at 80 yds with anthesis. The water is in the bank very little. About 2 miles further you come to Yemma-been.
Bomoo-goon	½	52		This is a very small village. Immediately after leaving Yemma-been you will find the edge of a large bed of sand and mud. A very small stream runs along the east side of it. This is a very bad little stream. Crossing a hill another similar sand and mud patch is reached. A few paddy fields and a village called Bomoo goon on one side. Little cultivation.
Lundor	1½	53½	Small stream	Close the village after leaving it the road crosses a small stream with the water from the river. The water is at 80 yds with anthesis. The water is in the bank very little. About 2 miles further you come to Yemma-been.
Thempalet	2½	56		The road passes through paddy fields. A few houses on the way. Thempalet is a 8 or 10 houses and is situated in a very fertile place. Good water is procured from a large and deep well.
4. Mithalan 10½	4	60		Leaving Thampal proceed in a south-easterly direction and pass a small village of 10 or 12 houses. Just after passing these the lak of Mithalan can be seen. The road now lies over a very fertile plain, many miles in extent and highly cultivated. It is a nice country, but the principal crops are rice and sugar cane. After passing over the lak you will see a small grass plain up to the hills. This is built of oak wood and is 12 feet high and 100 feet wide. It is strong and for a long time bridge in good repair. It passes the neck of the Mithalan lake. The plain extends about 15 miles south. To north is a small jungle, which extends with intervals of clearing right up to Ava. It is nearly all bush jungle and quite open.

Route No 35—contd

From Myia-gyan to Myia-gyan—contd

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter-mediate.	Total.		
	Miles.	Miles.		
				Mithalan is rather a small place not so large as Mah lino-nyo, and seems of no importance as a commercial centre. The headman of this place was very insulting to Mr Rowall who left the place early in the morning. The road from Thengpalet to Mithalan is over a grass plain, on which grow melons pumpkins, &c.
Gandoung	7	67		The road from Mithalan to Gandoung is good the whole way. The country passed through is very lightly cultivated. (Don't mind) a small village of about 30 houses. The soil is laterite all the way.
Meeyah	2	69		Leaving Gandoung pass a few houses and at half a mile a well of capital water on the side of the road. The well is at least 12 ft in diameter and the water 20 to 25 feet below ground level. The road then goes through paddy fields, and to judge from the present appearance would be very bad in the rains. The paddy is in excellent condition of two or three miles on either side. The country beyond is scrub jungle. Meeyah is a village of 20 or 30 houses. There are also several pagodas and kyungs.
Koko-goon	2	71	Small stream fordable at all times	About a mile after leaving Meeyah cross a small stream which will be in rain season about 1 yard wide. The road is in the middle of the stream goes round, and a road still better and after passing it again leads through paddy fields. These extend for 6 or 8 miles to east.
Pway-da-yoo	1½	72½	Stream 15 yards wide fordable at all times.	Leaving Koko-goon cross another stream which would be wild in rain but would probably be 1 ft or 2 feet deep in dry. This stream would be 1 ft deep in dry. It is not very deep. From here to the village of Pway-da-yoo is about half a mile. This is a very small village but within all the village there are good wells of water. The country is cultivated with onions, tomatoes and brinjals. Beyond cultivation is scrub jungle.
Yen-dor-myo	1½	74		The road to Yen-dor-myo from Pway-da-yoo is bad and across paddy fields which extend a couple of miles on either side of the road. The approach to the village is across paddy fields and a very dry place lying in a small stream. This is a strip of swamp 1½ miles long and about 200 yards wide. After passing this you come to some Pway-gye kyungs with two small tanks outside with little water now. This is a large town with plenty of pagodas. A large flock of goats seen here.
5. Maggassoo 16	2	76		Leave Yen-dor-myo and take a south-easterly direction the road passing through paddy fields. All about here is paddy cultivation. Maggassoo is a village of 40 or 50 houses. There are lots of bullocks here. From Maggassoo another village called Tummagoo, lying about south, can be seen.

Route No 35—contd

From Myin-gyan to Nya-n-gyan—contd

Names of Stages	Distance		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles	Miles.		
Tay zoo	2	79	Small stream	<p>Leaving Magrasoo, about $3\frac{1}{2}$ miles cross a small stream with a little water in it. After leaving this a short distance pass on the right of the road the village of Whooloo. To the right and bearing south is a small range of hills about 10 or 12 miles off, and there are many villages about the plain. The road up to this is bad.</p> <p>Still crossing paddy fields you come to a small village called Tay zoo of about 20 houses. A little before reaching the village a fine well of water 10 or 12 feet in diameter is passed.</p>
Pway-boy zoo	5	84	Stream	<p>From Tay zoo the road passes through paddy fields to the foot of a small hill on which are two or three very old pagodas. From this hill you can see Pway-boy-zoo $\frac{1}{2}$ miles distant to the south-east.</p> <p>Just outside of Pway boy zoo is a good sized tank of good looking water.</p> <p>Pway boy zoo has a large market every five days, on which occasions it often happens that as many as four hundred carts collect.</p> <p>There are many pagodas in and around this place and a very good hunting ground close to some kyongse.</p> <p>This is on the south-east side of the town and is of great extent. It is on the bank of a stream in which there is now a little running water but which will probably dry up in the dry weather. It is about 50 yards wide. The country for about 5 miles all round is pasture and paddy land and there are great numbers of cattle.</p> <p>The hills are about 15 miles off to the south-west and about 150 to 200 feet above the plain.</p> <p>The approach to the stream from the town is down a steep bank. From the plain on the Toungoo side it would probably be very bad in the rains for carts.</p> <p>In the heavy rain Mr. Bosall does not think there would be above four feet of water. When he crossed it the stream was about 20 yards wide and 6 inches deep.</p> <p>The people here were so annoying from their curiosity that Mr. Bosall had to leave the place without eating his breakfast.</p>
Pee-o-gone (stream)	2	86	Pre-o-gone (stream)	<p>Leaving Pway boy-zoo you cross this stream and then a few paddy fields. On the left is a small village with several pagodas. Pre-o-gone is on a small hill on which are several pagodas. Hundreds of cattle may be seen all over the plain.</p>
Ta-dah-oo	1 $\frac{1}{2}$	87 $\frac{1}{2}$		<p>Leaving Pre-o-gone the road passes over paddy-fields, extending some miles on either side and continues up to Ta-da-oo which has several pagodas.</p>

ROUTE No 85—contd

From Myin-gyan to Nya-gyan—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
6. Soo-dah	1½	89	Small stream	Leaving Ta-dah-oo cross a small stream not quite dry. The road is rymnddy a rose paddy fields (Mr Bozall thinks this part will be impassable in the rains) to Soos-dah a small village
Ya-war-dee	2	91	Stream	From Soo-dah the road crosses over a wooden bridge with plank ends. It is 11 feet wide and 18 feet long, and it is good repair. The stream has plenty of water in it now and the natives say that the supply never fails in the hottest weather. There are no wells here. The approach to the bridge is good from both ends. There are plenty of cattle here and the same may be said of all the villages on the road. After crossing the bridge the road passes over a sandy plain for about half a mile and then through paddy fields all the way to Ya-war-dee. Two miles further on before reaching this, pass a small village.
Nin-gan-goon	2	93		From Ya-war-dee to Nin-gan-goon the road lies across paddy fields. There are several large pagodas here. The jungle here is larger and shows that the ground is good. The paddy extends nearly 1½ miles on either side.
Ye-may-then	1½	94½		Leaving Nin-gan-goon cross a small swamp. There is a large brick pagoda about half a mile from it that would furnish bricks enough to build a causeway across it. From this place Ye-may-then is about half a mile. This is a large place and there is much traffic in produce with the surrounding country. There is a bazaar every day and plenty of carts are to be had on hire. There are many Khakhs here. The approach to the town is difficult. There is a good sized tank at the entrance from the Myin-gyan side, over which there is a brick bridge. Ye-may-then is divided into two parts by two tanks—drinking places. The connection is a road on a bund between them. A road runs due north to Hluo-dot.
Tow-char-nee	3	97½		Leaving Ye-may-then you come to a plain of some miles in extent. On the east is paddy land and marsh swamp. The road passes over land that has the appearance of having grown rice but which has not been cultivated this season. The road now takes a more southerly direction and passes alternate swamp and paddy. From Ye-may-then to Nya-gyan is according to the Burmese 60 miles. Four or five miles from Ye-may-then the road passes through a scrubby sort of jungle. This part will be very bad in the rains. About six or seven miles you come to two small villages about 2 miles apart, one on the top of a slight elevation, the other lower down. There is much paddy land about here and plenty of cattle and carts. The Thoo-gyoo lives in this village. The surrounding country is an open plain. The water supply is good and is procured from two wells which have always water.

ROUTE No 85—contd

From Myin-gyan to Nya-n-gyan—contd

Names of Stages	DISTANCE.		Rivers	Remarks
	Inter-mediate	Total		
	Miles	Miles		
7 Nounng low 18	15	112½	Small stream deep and muddy	<p>Leaving Tow-charnee the road leads in a south-easterly direction through open jungle and paddy land to another small village.</p> <p>Immediately after passing this you descend a steep bank, and cross a deep muddy stream about 15 yards wide. The bank 10 or 15 feet high and steep on both sides. The road passes through open jungle and paddy land, and at two places further on crosses a small stream and after passing three small villages leads to a large village called Nya-n-gyan about 18 miles from Ye-may-then.</p> <p>The road all along is bad, the sandy parts being very heavy for carts and the paddy land in places very rough. There seems to be plenty of water at this village, and a lot of firewood. There is a fine view of the mountain to the east and to the west, rising land is to be seen. The hills are low and at night and where there is jungle it consists of eng and acrub.</p>
Targoon	6	118½		<p>The road lies through much bamboo jungle and paddy land. Passed a village.</p> <p>Mr. B. Hall could not ascertain the names of these hills. In that case they gave him different names.</p> <p>The country appears to be well cultivated and rather fertile, suitable for rice. The road sandy and heavy very bad places with thick heavy mud where it would be impossible to pass with carts. All the villages have plenty of cattle and paddy is cultivated.</p>
8. Onadar, 13	7	125½		<p>From Targoon to Onadar the road is mostly through jungle. The Nya-n-gyan forest commences here, and increases in thickness as you travel south.</p>
Padogoung	5	130½	River 10 yards wide sandy but tom	<p>Leaving Onadar the road passes two small and one large village. It is dry.</p> <p>It is low to the bank of a wide river dry now the bed about 100 yards wide bottom sandy.</p>
Shway myo	3	133½		<p>Crossing the river the road lies through bamboo and tree jungle. It is an approach to the river bank but does not recross it. It is very bad in places, and in others tolerably good.</p>
Onadar	2	135½		<p>Shortly after leaving Shway myo crosses a small stream of good water. Between this and Onadar you pass three swampy places with plenty of water for cattle and cross several beds of small streams. The road is for the most part sandy and very heavy.</p>
9 Nay za-gin 13	3	138½	Small stream	<p>The road from Onadar is sandy and very heavy.</p>
Zabingon	2	140½		<p>About a ½ mile after leaving Nay-za-gin there is a swamp across the road from 80 to 70 yards wide and about 400 yards long. The road is bad the whole way. This place is partially surrounded by a bamboo stockade.</p>

Route No 85—concl'd

From Myin-gyan to Nyin-gyan—concl'd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
Chadogan	1½	148		After leaving Zabingan you cross a strong teak wood bridge wide enough for one cart. The road lies across paddy fields.
Theagone 10 Nyin gyan	4	146		From Theagone to Nyin-gyan the road is very heavy, mostly sandy gravel with about a mile of paddy field close to Nyin-gyan.

Note.—From Myin-gyan on the Irrawaddy to Nyin-gyan is ten days' good march for bullock carts. The road lies through a plain for nearly the whole way and the highest elevation above it is not more than 100 to 150 feet.

Route No 36

From—PAKHAN-NGAY

To—YANDABOO

Territory—BURMA

Authority—Quarter Master General's
Department, Madras (date 1826)

Names of Stages	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
Pakhan ngay	1½			The Madras column under Brigadier-General Cotton performed this march in February 1836. Road heavy in bed of river. Country open and covered with dry grain. The bank of the Irrawaddy was ascended and descended once. Neither difficult. Road good; soil light.
Tsao-ban-goun	2½	5		A long strip of the bed of the river near Tsao-ban-goun was cultivated with tobacco, Bengal gram, and kooly. Road good; soil light and sandy.
Thagew	½	5½		Small village.
Nee-roop	2	7½		Small village.

Route No 86—contd.

From Pakhan-ngay to Yandaboo—contd.

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles	Miles.		
Silay myo	4	11½		Large village stockade deserted. The bank of the river not quite so abrupt as heretofore and the country gently undulating. The stockade of Silay myo was in good repair but not quite finished there appearing to be a want of good materials in this open country. Road good; soil light sand.
Sepan-gyoung	2½	14		Small village.
Zee-gyo-been	3	17		Small village. The country from Sepan-gyoung again covered with bér jungle and low forest trees. Ravines steep and difficult. Roads bad for gun and carriage from the number of ravines and the sand occasionally very heavy intermixed with loose gravel stones.
Camp	4	21		Country and jungle as before. Abrupt steep banks to the river and numerous nalas. Forage to be procured around.
Tay-say	12	33		The division under General Cotton joined Sir A. Campbell's force here on the 9th February and when united the two divisions marched at 9 o'clock to attack the enemy's position in jungle near town of Pagan reported to be 17,000 strong. The attack commenced at the large pagoda at the right of the road in advance of the two stockaded pagodas. The whole of the work together with the town were in our possession by 2 o'clock with but trifling loss to our side.
Pagan	10	43		The stockade around the town of no strength being badly erected. The ruin of an old wall. Cholan and other bricks were produced in great abundance. Country of no great fertility but the low hills make a turn here to the eastward. The first mile on the road the mud is very good. The country and the stockaded pagoda was covered with very thick jungle.
Nyoung oo	2½	45½		Large village. General appearance of country from Pagan was undulating and covered with hām kooly, Pagan-cu, Bungal grass, and other dry grains. Road good; soil light sand.
Pullam	8	53½		From Pagan here the country is covered with bér jungle. The road good but occasional deep sand renders it difficult for guns.
Oon yay	1½	54½		Small village. Road good.
Atan yay	1½	56½		Small village. Road good. The road to Atan yay is a continued sheet of cultivation.
Thwe-down ya-mine.	1½	58		Small village. Country flat covered with cultivation of kōkly cotton, Bungal grass, beans, oil trees and rice. Forage abundant. The camp was pitched on finely cultivated upland on the bank of the river covered with water when river is full. Road good, occasionally very sandy.
Lutoop	7½	65½		Village. Road as before.
Keo-ee	2½	67½		Small village. The force marched over cultivation between the water and the river's high bank. Road as before.

Route No 36—conold

From Pakkan-ngay to Yandaboo—conold

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter-medial	Total		
	Miles	Miles.		
Shway gain bew	2	69 $\frac{1}{2}$		Small village. Country open, covered with cultivation of paddy and dry grain.
Yubbay	3 $\frac{1}{2}$	73 $\frac{1}{2}$		
Naben zee	1	74 $\frac{1}{2}$		Ascend and descend the bank of the river between Mwee-poup as it lies away but is very steep. Road good in dry weather. Soil rich light mould.
Mwée-poup	$\frac{3}{4}$	75 $\frac{1}{2}$		
Peca-bway	2	77 $\frac{1}{2}$		
Camp (near Tun-oun-dine)	3 $\frac{1}{2}$	81 $\frac{1}{2}$		Camp on a fine green sward. Road as before.
Tun-ound	1	82 $\frac{1}{2}$		Large village. A large extent of paddy ground around the village and tucked on the abrupt bank of the river. Road as before.
Gyoke-pin		82 $\frac{1}{2}$		Village. The road led mostly over a plain of dry earth at a distance between the abrupt high bank of the river descended at Gy k-pin and the river.
				The appearance of the cultivation was abundant, and the forage most abundant.
Myin gyan	5 $\frac{1}{2}$	87 $\frac{1}{2}$		Destroyed.
Goung gway	2 $\frac{1}{2}$	89 $\frac{1}{2}$		Destroyed. Road good. Soil light rich mould. Country flat and finely cultivated.
Taroup-aneng	2	91 $\frac{1}{2}$		Small village.
Taroup-myo	2 $\frac{1}{2}$	94 $\frac{1}{2}$		Large village. There is a very large extent of paddy ground around Taroup myo said to be the spot where the Chinese were defeated on their first invasion of Burma. Road as before.
Tay-do-ya-zek	2	96 $\frac{1}{2}$		Small village. Good camping ground. Much high grass about the bank of the river.
Camp	1 $\frac{1}{2}$	97 $\frac{1}{2}$		
Shway lay Sen gyoun				
Nugeen gay				
Yan-da-boo	3	100 $\frac{1}{2}$		Deserted. Road very good.

Route No 37

From—PATANAGÓ

To—MANDALAY (by land)

Territory—BURMA.

Authority—Two Natives of British Burma (August and September 1880)

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter- mediates	Total		
	Miles	Miles.		
Patanagó				<p>This village is on the left bank of the river Irrawaddy. There is a good landing place and the bank is not steep. The village consists of 50 small houses. Each house-owner (four or five excepted) has a cart or more 4 or 5 bullocks, and 6 or 7 cows. The principal products of the place are paddy Indian-corn and sesamum seed. To the south-east of the village are two tanks said to contain fish. The houses here as well as in other places, are built mostly of bamboo and a few of wood. They are generally roofed with thikak (a kind of grass) and palm leaves. The monasteries occupied by the Buddhist monks are about the best buildings, and are generally built of wood. These remarks may be generally applied to other towns and villages passed through on this route. On the opposite bank is Maloon-myo said to contain a population of a thousand inhabitants. It is the head quarters of a Myo-oke.</p>
1 Koolce-kone	5			<p>A cart road passes through the middle of Patanagó and leads to Koolce-kone fort and Myin-goon town. The road is wide and dry even in the rains. Following this road to the north at 4,360 paces distant a track is met which leads to the river on one side and to a monastery on the other. Near this is Paya-gyee village. Opposite Koolce-kone is the old town of Myin-hia, said to contain 400 inhabitants. Leave Koolce-kone by a track which leads in a northerly direction across the fields, and passes within sight of Gway kone village. Near it is a hill with a pagoda on it, about 400 paces distant from Koolce-kone.</p>
Paya-gyee	0	5½		<p>This village is half a mile from the fort, and ½ mile from river. It consists of about 30 huts. There is a pagoda on top of a hill close by which is about 300 feet high.</p>
Tha-zee	1	6		<p>Then by cart road to Tha-zee village which is nearly a mile from the fort. This village is also called Tha-zee-taing-da and consists of about 40 huts; and half a mile north of it is a small stream breast high current moderate. It is said to be dry in October. A cart road runs from Tha-zee to Toung-dwen-gyee.</p>
Im boo	2½	8½		<p>Is a village of 40 huts, 3½ miles north west of Tha-zee. There is a sayat in good order near it.</p>
Myin-goon	1½	9½		<p>This town is surrounded by hedges and branches of thorn. It has two gates. Most of the towns and villages are protected in this way. This town is supposed to contain 4,000 inhabitants. There are walled pagodas to the north and west of the town.</p>

ROUTE No 37—contd

From Patanagó to Mandalay—contd

Names of Stages.	DISTANCE		Rivers	Remarks
	Inter- mediate	Total.		
	Miles.	Miles		
Kya-ket-soo	3	12½	Ford three small streams.	Leaving Myin-goon ford three small streams and reach the village of Kya-kat-soo. This consists of two clusters of huts, 300 paces apart, and numbering about sixty. Here is a large stream called Yin koung which was deep in August. It is said to have little water in the dry season. On the opposite bank of the stream is Yin ywa, a small village. The current was pretty strong.
Tat-kone	2½	15½	Toung-dwen choung Strong current breast deep.	Proceeding in the same direction reach Tat-kone village, which is 2½ miles from Yin ywa. About a mile above which place a stream must be crossed and a mile north of the stream a hollow. A yonk kone village is 300 paces north west of Tat-kone and 100 paces from a large stream called Toung-dwen choung. The current was exceedingly strong and the water breast deep. After crossing this walk through mud, 2½ to 4 feet deep for three-quarters of a mile. Then reach field with palm trees, where the ground was firmer and 600 paces further on reach Zee-gyoon-galay.
Zee-gyoon galay	2	17½		This is about 2 miles from Tat-kone, and contains about 40 huts. There is also a sayal. Leave this by cart road in a north west direction and reach Ma-gyee-kan village at 4½ miles.
Ma-gyee-kan	4½	21½		A large tamarind tree and a large tank will be seen before reaching this village. The water in the tank is good for drinking. The village contains 60 small houses, and the spot occupied by the monasteries is a pleasant one and spacious. Most of the people between Myin-goon and this are cultivators. On the 24th August left Ma-gyee-kan and went in a north-east direction keeping the telegraph wire in view. At 1½ miles a road on the left leads to Selk tha village.
San ywa Nwa-gyoo	1 1	22½ 23½		About half a mile to the north west of Ma-gyee kan is San ywa village containing 40 huts. Proceeding in the direction reach Nwa-gyoo village which is about a mile from San ywa. It contains 60 huts.
Ma-gway	3½	26½		There is a tank near the road to Selk tha. Ma-gway contains about 3000 inhabitants. Many logs of timber and piles of brick were lying about near the monasteries. They were intended for building monasteries and pagodas. In the dry season there is a good road along the river from Myin-goon to this town the distance being nearly 10 miles. We could not go along this road owing to high water which is said to commence to decrease at the end of this month. Leaving Ma-gway proceed in northerly direction. About a mile from the town is a new bridge measuring 63 paces by 4, over a small stream which was then quite dry. About 400 paces to the north of this was another smaller bridge measuring 20 paces by 4. Near this bridge is a famous gift pagoda called Myasaloon. It is situated on a hill close to the river, and may with improvements and alterations be used for defensive purposes. There are trees about the pagoda.

ROUTE No 37—contd

From Patanag to Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total.		
	Miles.	Miles.		
Wa-gyoung	1½	28½		There is nothing remarkable to note about this village
Ale-gyoung	2½	30½		Two and a quarter mile further north is Ale-gyoung which consists of one family. The number of huts is about 30. There is a small stream close by which bears the same name. It was dry then.
Tha-pan zok	2	32½		Proceeding in a northerly direction arrive at Tha-pan zok which contains about 50 huts.
Kayin ywa	3	35½		Then proceed along the bank of the river and arrive at Kayin ywa. This consists of about 30 huts. There is a small stream near this village called Kayin-gyoung. It was about 3½ feet deep in deepest part but the current was weak. On the opposite bank is Ma-gyee-chay-dook a small village containing about 25 huts.
Pay-daw	3½	39½		Paydaw village is 3½ miles north-west of Ma-gyee village.
Wet-ma-soot	1½	40½		Proceed along banks of river until Wet-ma-soot is reached. This small town contains 700 inhabitants, and is the head-quarters of a Myo-oke. Leaving Wet-ma-soot proceed in a north westerly direction.
Kyee-zoo	2	42½		At 1 mile ford the Nyoung-oke-choung. There is a little village on the opposite side of this stream which is supposed to bear the same name. About a mile to the north is the Kyee-zoo village which is situated on both sides of a nameless stream. Beside it is a mile from Tha-pan zok. Yone-zek is 1 mile north west of Behseek and consists of 40 huts. Se-dang kan village is 2 miles from Yone-zek. Nyoung hta is 1½ miles north of Se-dang kan. This is one of the ports of call of the Irrawaddy Flotilla Company's steamers.
Yay nan gyoung myo		50½		Bit-ta bway is 1½ miles north of Nyounghta, and a mile above this is Yay nan-gyoung-myio. This is the residence of a wuon and is famous for petroleum of which there are many wells in the adjacent villages. All the hills here are accessible to artillery. Almost every village possesses cows, fowls and pigs in fair numbers. A journey by the route along the river would become practicable about the end of August. A large number of boats were seen on the river. Every town and village on the river possesses an adequate number of boats. Large jars are manufactured here for earth oil. Two small streams run through the town—one is shallow and the other bridged the bridge haky. Near Yay nan gyoung and travel north-west keeping telegraph wire in view.
Pounga-daw	1	51½		A village of 45 small huts.

Route No 37—contd

From Patanagó to Mandalay—contd.

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
Tha-byay bin	4½	55½		On the right bank of a stream called Pin-wa-choung Two villages on the bank of the river are passed at a distance—Nyoung-gyoung and Taing-gyoung. The first is said to be a mile from Pounga-daw and the second about 10 miles from the first. Leaving Tha-byay bin proceed along the stream to its mouth; the depth only 2 feet.
Koon-gyan	1½	57½		Koon-gyan village consists of about 50 huts, and is said to contain 1,000 inhabitants. Jaggery is manufactured here and in the villages near.
Saleh	2½	60½		Saleh is a village of 50 huts; it is also called Ka-leh.
Kyonk yeh myo (town)	2½	62½		Proceed along the river to Kyonk yeh. Cross on the way four streams more than breast-deep. This town is said to contain 2,500 inhabitants. Fishing is carried on here. There were a few bushes on the way from Saleh to Kyonk yeh. If these were cleared which could easily be done, there is nothing else to render the march of troops difficult or wearisome.
Ywa-thit	1	63½		Leaving this proceed in north westerly direction. Pass Ywa-thit at one mile. It consists of 30 huts and many cattle. Near this is a small nameless stream, which is fordable.
Peh dwey choung	2	65½		This village is 3 miles north-east of Ywa-thit. North of it is a stream of the same name which was deep towards the mouth. Only one big boat was seen in this village.
Meh ywa	1	66½		Meh ywa is only a mile from last village and consists of 40 huts. Close by it is a shallow stream.
Toung ba-loo	1½	67½		A village of 40 huts. On an island opposite is Ngway-thoung village. Ywa-yag lies south-east of it. Bin-broo-gyon is situated on an island above Ngway-thoung. It is one of the most important commercial towns, and is said to contain nearly 20,000 inhabitants.
Nyoung-gyoung	1½	69½		Salin an inland town, is said to be 8 miles west of the above.
Win-ga-ba	1½	70½		Before reaching this village the route goes over hills and across streams. These are somewhat deep near the mouth.
Salin-doung	2	72½		From this we proceed in a north-westerly direction, keeping the telegraph wires in view and reach Pagan ngay in evening. This town contains about 3,000 inhabitants. There is a bridge over a small stream before reaching town.
Pagan ngay	3	75½		

Route No 37—contd.

From Patanagó to Mandalay—contd

Names of Stages.	Distance.		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles	Miles.		
Ywa-ngay kan	1½	75½		Leaving this town proceed in a north westerly direction along the cart road near the telegraph lines. Ywa-ngay kan is 1½ miles off. About a mile to the north of this is a village of which the name is unknown.
Pagan-zoo		74½		Pagan-zoo village contains about 30 huts. Ywa-thit lies to the east.
Shin bin-saggo	4½	81½		Shin bin-saggo has a famous pagoda of the same name. Salay myo is 3 miles north-east of the above, and contains about 3,000 inhabitants. The town is famous for a kind of cotton cloth used by the Burmans as blankets.
Ma-gyee-kan	3	84½		On the right hand side is Ma-gyee-kan village, which is 3 miles north west of Shin bin-saggo. There is a road from this to Salay myo. At the junction of these two roads is a sayat.
Hnaw gyong	3	87½		This village is situated on a stream of the same name 3 miles north west of the last village. This stream at the time of crossing (end of August) was almost dry. There are only 15 huts in this village. Goats, pigs, and fowls are procurable.
Zee-gyo-bin	1	88½		This village consists of about 40 huts. The road from Pagan ngay to this is comparatively good.
Pyin ma	1½	90½		On 30th August leave Zee-gyo-bin village and follow footpath, keeping telegraph line in view and pass Pyin ma village.
Nyong byoo-bin	½	91		Village situated near a stream. The route again lead over hills and valleys to a small village of 20 huts called Bone-ma-yaza-chouk.
Bone-ma-yaza-chouk.	1	92		
Singoo	5	97		Singoo is a commercial town containing about 4,000 inhabitants. The road leading here from Bone-ma-yaza-chouk is tolerably good. Between the two places there is a bridge 16 paces by 2 over a small stream. Close to the bridge is a sayat.
Mee-loung bya	3½	100½		Leaving the town of Singoo proceed by the telegraph road in a northerly direction. Mee-loung-bya consists of about 30 huts in two clusters.
Kathit-kone	½	100½		A village consisting of about 30 huts in two clusters, ½ mile north-east of last village.
Kya-o or Kya-lo	1½	100½		A village of 300 inhabitants north-west of Kathit-kone.

ROUTE No 37—contd

From Patanagó to Mandalay—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
Ywa-thit	1	102		A village of 80 huts 1 mile north of Kya-o
Shway gyong by in	2	103½		A village north of Ywa-thit.
Ywa-tha	4	107½		A village of 70 huts north of Shway gyong byin.
Ganga	3	110½		This village is three miles north of Ywa-tha.
Monat-pyin	2½	112½		North of Ganga village. Consists of two parts and contains 70 huts. There is a walled pagoda near it on the bank of the river.
Pyin ma-ka	3½	116		Leaving this village proceed in a northerly direction by the cart road and arrive at Pyin ma-ka village.
Pagan	1	117		This is said to contain 2,000 inhabitants. A small stream runs through the village. It is crossed by a bridge measuring 42 paces by 4. There are a great many ruined pagodas about this place.
Ananda pagoda.				The city of Pagan is only 1 mile north of Pyin ma-ka and is said to contain 7,000 inhabitants. This is the ancient capital of Burma. Ruins of the old ramparts are still to be seen. Nothing has been done to renew them.
				There are many pagodas here that with slight alterations could be used for magazines and store-houses. Of these pagodas one is worthy of especial notice. It is called the Ananda pagoda. It is situated on high ground with a cluster of monasteries and sayats close by and with a few improvements and alterations could be made a very strong fort. It is contained within a walled enclosure which has four gates one on each side. Besides these there are strong ditches within the pagoda itself. Here troops might be quartered.
				At this place Burmese toilet and betel boxes are manufactured.
Nyoung oo	3½	120½		Leaving Pagan proceed in a north-easterly direction to Nyoung-oo. This is a commercial town and contains about 3,500 inhabitants.
Shway zee-gone pagoda.				Here is a famous pagoda called Shway zee-gone. A few men are kept to watch the pagoda as it contains some jewellery belonging to the late Queen of Ava.
				In no respect is this pagoda inferior to Ananda. Here superior boxes are manufactured. A road leads from Nyoung-oo to Yay-dwin-gone, 1½ miles to the north-east. This meets the telegraph road at a point one mile from Nyoung-oo.
Palin	5½	126		At a distance of 2,750 paces from this place is a hollow 50 paces wide, which may be crossed by cutting slopes on each side. There is a tank 100 paces from this. Palin village is about 5½ miles north-east of Nyoung-oo, and consists of two parts, one mile apart. Each of them has about 80 huts.

ROUTE No 37—contd

From Patanagó to Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks
	Inter- mediate	Total		
	Miles	Miles		
Tagoung-deh	1½	127½		Tagoung deh village is about 1½ miles north east of Palin on the right hand side of the road, and contains 40 small huts.
Ouk hnyn	1½	129		North of Tagoung-deh. It is also called Payyoo
Atet-hnyn	1½	130½		North of above village Thit-touk is 1½ miles east of Atet-hnyn.
Thit-touk	1½	132		
Thit-touk ywa ma.	1	133		Above Thit-touk village
Ma-gyee zouk	½	133½		The people of these villages live principally on Indian-corn
Let-toke	3½	137½		The road from Ma-gyee-zouk to Let-toke is good during the dry weather but in the rains there is mud knee deep in places. Let-toke village contains about 800 inhabitants. Snakes are said to be numerous in this place, and the villagers state that many deaths among men and cattle occur from snake-bites. There are three villages on the bank of the river—Let-pan-chay haw Thuyet-kone—One-hnsh kone—about a mile apart from each other
Man la	1½	139		Leaving Let-toke (18th September) proceed in north-east direction and reach the village of Man la at 1½ miles. It contains 400 inhabitants.
Kyaw zee	1½	140½		Contains about 60 houses.
Kayin teh	1½	142		Contains about 60 houses; also called Taining-doung
Da-hat-taw	1	143		North-east of Kayin teh. It has a good camping ground with good water-supply
Kya bo	1	144		This village consists of two clusters of huts numbering about 70 and about 1 mile apart between these villages is a tank said to run dry in the hot season.
Min-gyoon	1	145		North-east of Kya-bo and contains 400 inhabitants.
Ywa-damike	½	145½		This village is ½ mile from Min-gyoon, and contains about 1 000 inhabitants
Pato	1½	147½		Consists of two clusters of huts numbering about 60. There is a famous pagoda of the same name in the middle. This village has a good camping ground and good water-supply
Tha-boung	1	148½		North of Pato. Consists of 60 huts in two clusters.

Route No 37—~~38~~12

From Patanag to Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	<i>Inter-mediate.</i>	<i>Total</i>		
	Miles	Miles.		
Pyaw bweh	1	149½	Stream breast-deep	North-east of Tha-boung Consists of 60 huts.
ywa-thit.				
Choung bouk	1	150½		Situated on a stream of the same name The current was strong (September) It was fordable This village is said to contain 800 inhabitants The road travelled was a cart road
Sin-deh wa	..			On the opposite bank of the stream is Sin deh-wa village
Lee-gyoon				Lee-gyoon village is situated on an island in the river. It is ½ miles from Sin-deh-wa, and consists of 30 small huts.
Ta-noung-daing	1	151½		This village is situated on high ground, and contains about 2,500 inhabitants
pyaw bweh.				
Gyoke-bin	2	153½		North-east on high ground near the river and contains about 800 inhabitants The cart road which leads to it is bad during the rains There are wells in the last two villages. Jaggery is manufactured in the latter
Then ywa	1	154½		North of Gyoke-bin village
Ywa-zee	1	155½		North.
Sha-daw	½	155½		North. Contains about 400 inhabitants A little above this village and before reaching Myin-gyan which is only half a mile from Sha-daw is a large stream which is deep near the mouth Where the route crosses, it was breast-deep in September
Myin-gyan	½	156½		This is one of the most important commercial towns along the river and is said to contain 20,000 inhabitants Much trade is carried on here in cotton, hides, and sesamum oil
Choung toung	½	156½		Leaving Myin-gyan the road takes an easterly direction near the telegraph line Choung toung is ½ mile from Myin-gyan and contains about 500 inhabitants Cross a stream before reaching this village breast-deep
Leh-dee	3	159½		The road from here to Leb-deh village is tolerably good but it was muddy in places. The village contains about 1,000 inhabitants.
Nabeh-gwa	4½	164		Two miles from Leb-dee is a village on the left hand side called Ta-woon-bo. The village along the road surrounds their land with branches of thorns and some telegraph posts are within these boundaries.
Leh thit	½	164½		Leaving Nabeh-gwa pass the village for Leb-thit at ½ mile At two miles is a sayat on the right hand side of the road. There is a tank close by At ¾ miles a cart road branches off on the right to Ywa-tha-ya. This road is a mile long and in September muddy

ROUTE No 37—contd

From Patanagó to Mandalay—contd

Names of Stages.	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles.	Miles.		
Ywa-tha-ya	3½	168		Ywa tha ya village contains 1,800 inhabitants. The chief authority of the place is Thwa tonk kyee, who exercises the function of a police officer. There is an unusually large number of cattle in this village. There are two clusters of monasteries. The space occupied by one, which is nearest the road, is spacious and suitable for encampment. Near this is a tank which contains in all seasons good drinking water. In this village jaggery is manufactured. Best palm leaves for writing are obtained in this place.
Koke-keh	1	169		Leaving Ywa-tha ya proceed in a northerly direction and reach Koke keh at 1 mile. This village contains nearly 800 inhabitants.
Chin myit-chin	1½	170½		North west of Koke-keh. About 15 huts. There is only a footpath between the two places. There are some bushes on both sides of this path.
Myn tha	1	171½		North west. This village contains 60 huts. There is a cart road between it and Chin myit-chin.
Thaung-gone	1	172½		East. Consists of 70 huts in two clusters. Three hundred paces from this place is a stream called Gway-gyoung which is fordable. On the opposite bank is Gway-gyoung village. A mile further cross another stream. Come to a stream called Myay noo-ohung. On the opposite bank are situated three villages—
Sone ywa	1½	273½		Mya-noo Sone ywa, Shway ponk pin—close to each other and 1½ mile from Thum-gun. These villages contain about 800 inhabitants.
Kan hla	1½	175		Kan-hla village consists of three clusters of huts numbering about 80 in all. There is cart road from Sone-ywa.
Ponk-senn	2	177		North-east of Kan hla, and contains 60 huts. Road bad.
Nwa-dat	3½	180½		A small village. A tank, a well and a sayat are near the village.
Kyweh-senn	2	182½		East of Nwa-dat. Contains 400 inhabitants. Before reaching this village a small bridge with steep banks must be crossed. It may be bridged with little trouble being only 15 paces broad.

ROUTE No 37—*conold**From Patanagó to Mandalay—conold*

Names of Stages.	DISTANCE		Rivers.	Remarks.
	<i>Inter-mediate.</i>	<i>Total</i>		
	Miles	Miles.		
Myo-tha	3	185½		Leaving Kywah-sein proceed east along a footpath, and at 1 mile meet cart road, which leads to Myo-tha. This town is surrounded by branches of thorns, and has two gates. It contains about 3 000 inhabitants. Close by is a sayat with a well. There are other wells in this place. A stream runs near the town.
Kone-ywa				On the opposite bank is Kone-ywa, which contains 380 huts.
Ywa-thit	3	188½		North-east. Contains 40 small houses. The road between the two places is tolerably good. There are two large tanks near this village with good drinking-water.
Gway-gone	3½	192½	.	North-east of Ywa-thit, and contains 50 huts. A pretty good cart road between the two places.
Ta-noung gaing	2½	194½		North-east of Gway-gone. Population about 800. Jaggery is manufactured here.
Kan gyee-daing	2½	197		North-east of Ta-noung-gaing. Fifty huts. Here also jaggery is manufactured.
Taga-day	2½	199½		North. Consists of 40 huts in two clusters. There is no regular road between the two last places.
Byoo-kan	4½	204		North of Taga-day and contains 60 small houses. Two streams must be crossed, each breast-deep, before reaching Byookan. A few places before reaching the village is a large tank known as Kandaw or royal tank in which wheat is grown in the cold season. This is the only large village which has rice shops.
Tha-ngay-daw Tasee-yin.	2½	206½		From Byoo-kan a cart road leads in a northerly direction and at 2½ miles reaches Tha-ngay-daw said to contain 80 huts. There is a road here which leads to the river. Three miles to the north-east are three villages Pay kona, Teh-daw ya, Nagya-w ya. These are situated close to each other in a line extending 1½ miles. Betel is much cultivated in these villages. There are a few paddy fields which separate these from Taseeyin and Tada-oo.
Tada-oo	3	209½		North-east. These two villages extend from south to north about 1 000 paces.
Ava				The city of Ava is said to contain 60,000 inhabitants. The best place to land to attack Ava is Kyauk-ta-lone 14 miles below Ava. There is said to be a good road between the two places.
Mandalay				Mandalay is about 13 miles above Ava. It contains a population of 250,000.

Route No 38

From—PROME

To—AVA and MANDALAY (by river)

Territory—BRITISH BURMA and
BURMA

Authority—

Names of Stages.	DISTANCE		Rivers	Remarks
	Inter- mediate.	Total		
	Miles	Miles.		
PROME				A flourishing town of 40,000 inhabitants.
1 Thayet-myo (river bank)	44		* The river here is about a mile and a half in width at the end of the moon soon but much less in the dry weather and the current is at all times powerful.	The frontier station of British Burma. Established 1884 It has a fort of adequate strength and of dimensions sufficient to contain all the garrison and its habitants of the place This fort contains heavy guns, and may be reckoned impregnable against any force the Burmese could bring to bear against it. It is situated on a bluff overhanging the stream, and effectually commands the waterway A large barrack has recently been completed
2 Loung gyan doun				Loung-Gyan Doun is a small village on the right bank, a little below the large and richly wooded island of Loonyet. The village generally contains monasteries. From Loung-yan-doun cart roads pass inland in various directions. Surrounding ground undulating; bottoms only cultivated. Travelling upwards a lofty range of hills lines the right bank for some 15 miles, when it takes a westerly direction. The left bank is low and covered with thick jungle. Many villages appear on both banks, but there is no sign of extensive cultivation. North of Thayet-myo the village of Meaday is passed, and 6 miles from it the frontier
3 Min hla				The country on either side exhibits low undulations covered with sparse small trees and little or no signs of cultivation. On the west the hills recede away leaving for some distance on the river bank a level covered with rich wood. A second considerable island is called after Tunn gwen, a village inland on the east (L) bank. The island like Loonye is covered with fine trees, from which rise several considerable temples. Above Toun the river narrows to 1,200 or 1,300 yards, with high woods and banks on either side, and so continues for 3 or 4 miles till near Maloon where it widens and curves eastward. Maloon is a small village standing on the gentle slope of a hill which rises behind to an apex. This hill was the nucleus of the stockade taken in the war of 1836. Little population visible. "Patanago," a small village stands opposite. Min-hla is a thriving well built town containing about 1,000 houses with several monasteries. Boats numerous, some 120 to 130 tons burden. From this point till the town of Min-hla is reached, the course of the stream, divided into two channels by a large island, is twisting and irregular and the banks lofty and wooded. The Burmese made a stand here in the war of 1836.

ROUTE No 38—contd

From Proma to Ava and Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Inter-mediate.	Total		
	Miles.	Miles		
4. Magway				<p>* About 5000 inhabitants. A few miles north of this town another stand was made by the Burmans who erected a stockade on the neck of land formed by the Irrawaddy and Yru which joins it here.</p> <p>* Just above Min bla the stream runs with great violence. Bold cliffs of sandstone on the right bank with fine wood clustering round their base. Mengoon, a considerable village of 200 or 300 houses on the east (L) bank 3 miles above Min bla. Not far above Mengoon the river begins to change its aspect and assumes the form of a spreading channel from 3 to 5 miles wide embracing numerous alluvial islands which it retains at least as far as the mouth of the Chindwin. Along the whole of this distance on the eastward elevated country bugs the stream and finally rises from the water in bold decided banks. From Proma upwards vegetation had been losing its tropical character and now the uplands were clothed with sparse and stunted trees and bushes. These of lands sink at pretty frequent intervals into wooded valleys, running at right angles to the Irrawaddy into which they discharge the drainage of the interior by broad hollow sandy channels, always dry except after the heavy rain. On the west (R) bank of the river the high land ceases at Memboe (18 miles above the river) and a great alluvial plain stretches into the interior. After Mengoon the long village of Yuhinga and then Magway is left bank Magway, a large town. Some 200 or 300 boats of all sorts were lying at the ghats, and the number of houses was about 5000. Population about 8,000 or 9,000.</p>
5. Yay nan gy oung (L.)				<p>Memboe is the nearest point to the Aeng pass, and a road runs from this over the Arakan hills to Maphe at the foot of the pass as well as to the town of Mendoon, from which passes lead to Man in Arakan 30 miles further north is another pass.</p> <p>Ye nan-gyong situated in an inlet of the great sand stone cliffs, is celebrated for its petroleum wells. The character of the country now changes, thick jungles disappear and the land has a parched and inhospitable appearance.</p>
6. Kyoonyo (R)				<p>From here a road leads to some earth oil wells. The path is among ravines and steep hills till about three miles from town when a plateau is reached on which the wells are situated.</p> <p>Near the village of Tanta beng are some ruined temples, and further on the considerable village of Kyoonyo with numerous monasteries. A few miles upon the other bank Pokhan-gie is visible.</p>
7. Silay myo				<p>Above Kyoonyo the village of Sempthayagron from whence a lofty hill of Paopa is visible far to the east showing a double summick top; and a few miles further on Silay-myoo. The river is here very wide and full of islands. Silay myo is a good sized town and used to be celebrated for its silk weaving. There are numerous religious buildings.</p>

ROUTE No 38—*contd**From Prome to Ava and Mandalay—contd*

Names of stages.	DISTANCE		Rivers.	Remarks.
	Interme- diate	Total.		
	Miles.	Miles		
8 Seenggoo				<p>Pass Telk phyoo, where there is a large gilt pagoda to Seenggoo. Just below this one of the tributary channels enters the Irrawaddy. The country behind is formed in long gentle slopes, and much of it is fenced as if in habitual cultivation. Some 15 miles northward and a few miles distant from the river is a considerable but isolated range of hills about 700 to 1,000 feet high. They are the Tharawadi hills, and immediately east of Pagan.</p>
9 Pagan				<p>As the river is ascended the remarkable hill of Paspabe comes more conspicuous. The river near Pagan is very wide, sometimes as much as four miles with many islands. The east bank never rises more than 40 feet, but constantly dips into hollows full of oleiferous trees and many villages. The other shore consists all along of barren hills. Villages are numerous on both banks till the town of Pagan is reached.</p> <p>The ruins of ancient Pagan extend over a space about 8 miles along the river and probably averaging 2 miles in breadth. The present town of Pagan stands on the river side within the leveled ramparts of the ancient city near the middle length of the space.</p>
10 Koon ywa				<p>Above Pagan is the large and busy village of Kyonggoo, this the chief seat of the manufacture of lacquerware. Many boats of all sorts and sizes.</p> <p>Above this the sandstone cliffs again appear rising boldly from the water to a height sometimes of 130 or more feet and broken by frequent inlets.</p> <p>All the eastern shore for many miles above this is beautifully wooded and thickly set with villages surrounded by hedged fields. The land rises behind in a long gradual slope broken by ravines towards the lower ground near the river.</p> <p>On the west the country is much the same as on the east, numerous long straggling villages along the water line. One continuous town under the names of Mor-on-tsa and Pakoku seems to stretch for 3 or 4 miles. Some miles from the river two or three isolated hills rise out of the nearly level surface.</p> <p>On the western shore is the large village of Koon-yu-wa, marked by conspicuous temples and two gigantic griffin lions. The shore is lined with magnificent trees.</p> <p>The town is of considerable size containing probably not less than 1,000 or 1,200 houses, and the surrounding country seems peopled and productive. Behind the town and parallel to the river is a wide and well ordered road.</p> <p>Pakhan the head-quarters of the governor is said to be about 10 miles inland and to be a rich and handsome town.</p>

ROUTE No 38—contd

From Prome to Ava and Mandalay—contd.

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total.		
	Miles.	Miles		
11. Mym gyan (L.)	16			<p>A large town with a numerous and busy population. It lies very low only just above the highest water-level! The place is a great mart for rice both from Pegu and the adjoining low lands, and there are many large boats of 50 and even 100 tons burden. About 5 miles from the town a remarkable pair of twin hills may be seen rising to a height 9 000 or 1,000 feet. A road leads from this town to Toungoo <i>via</i> Yemetha and Hlone-det Gunpowder is manufactured here for the Burmese Government.</p> <p>The shores populous and finely wooded.</p>
12. Samait Kyon (L)	22			<p>About 6 miles below Samait kyan is the village of Yan da-bo. It is poor and not populous. Above Myeen kyan the river kyandwen enters the Irrawaddy</p> <p>Samait-kyan is a considerable village on the slightly elevated left bank. A creek runs through the middle of village, and a very long bridge connects it with the higher land behind, so during the floods the intervening space is covered with water</p> <p>A considerable amount of saltpetre is made here. From here for the next 30 miles the course taken is north-easterly and then for 24 miles an east-by-south one.</p>
13 Kyonk ta lonng(L)	28			<p>Twenty-eight miles higher up is the village of Kyonk-ta-lonng. The shores up to here are almost continuously fringed with rich wood, there are numerous villages. Kyonk-ta-lonng does not appear a place of much importance and from its being overshadowed by trees it is impossible to judge correctly of its size. There is a guard house here</p> <p>Opposite is the village of Yuwa-theit-gloee, containing about 700 or 800 houses. The village is traversed in all directions by hedged lanes, with gates at intervals</p> <p>Behind Kyonk ta-lonng is a low undulating tract. The country inland appears arid, parched and barren. Many cart roads traverse the summits and are in good order the natural drainage being favourable along the higher ground. No trees higher than a man.</p>
14. Ava and Sa- gain (L. R.)				<p>A few miles above Kyonk ta-lonng the high ground on the eastern bank which at that place comes close to the Irrawaddy retires having an alluvial valley of considerable width. A dense mass of wood marks the position of old Ava.</p>

ROUTE No 38—contd

From Proma to Ava and Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks
	Inter- mediate.	Total.		
	Miles.	Miles.		
				<p>Nothing now remains of the old place but crumbling walls, rotten stockades and shapeless mounds of earth which were once parapets. It is strongly situated by nature being surrounded on three sides by water. Opposite to Ava, embosomed in a thick wood, lie the ruins of Nagain another ancient capital.</p> <p>From this point the river flows north and south, and is cut up into several channels by wooded islands.</p> <p>Amarapura, the late capital only desecrated by the present king in 1858, appears in an inlet of the river about 5 miles from Ava. The wall and ditch which formed the defence of the city still remain in fair preservation but the place has been almost entirely deserted by the Burmese and is chiefly occupied by Chinese.</p> <p>The city proper is square and bounded by a defensive wall of brick 15 or 18 feet high backed by an earthen rampart. The four sides are each little short of a mile. Each side has three gates. At an interval of 100 feet from the walls a ditch 8 feet wide extends along the east and west sides, the greater portion of the north and half the south.</p>
Mandalay				<p>Mandalay some 7 miles further north, is the present capital of Burma, and is situated about 2 miles from the river a bank at the foot of an isolated hill 800 feet high.</p> <p>The city is laid out in a perfect square, the sides of which run due north and south and east and west. It is rendered secure against attack in the following manner:</p> <p>A solid brick wall about 25 feet high and 3 feet in thickness, surrounds the city. Behind this is an earthen parapet 30 feet thick, which being raised to within 4 feet of the top slopes away towards the interior. No revetment is attempted.</p> <p>There is little attempt at flanking defences; at about 150 paces buttresses protruding while at the angles two of these meeting have something of the form of a bastion. The wall is not loopholed or provided with embrasures for guns. Each of the sides is provided with three gateways constructed of masonry of immense thickness and solidity. The gate in the centre of the passage, which is about 15 feet in width, is of teakwood studded with iron nails, and is about 30 feet high and one thick. All the gateways are the same and are protected on the outside by ravines of solid masonry.</p> <p>A moat 100 feet broad and 6 or 7 feet deep surrounds the city the escarp being cut at about 80 feet from the wall. This moat is kept full all the year round.</p> <p>The roads in the city are wide but unmacadamised. One bridge crosses it on each face.</p> <p>The inhabitants of Mandalay number 20,000 within the walls and 80,000 without and consist of natives of Manipur and India, and Shans, Siamese, Chinese, all of whom intermarry with the Burmese. Opposite the city the Taragare hills look down and in places overhang the river and again recede to a distance of several hundred yards from the water's edge. They follow the course of the river north about 15 miles.</p>

Route No 39

From—SHWAY-GYREN

To—MANDALAY (via Western Karennee
and the Shan plateau)

Territory—BRITISH BURMA

Authority—LIEUTENANT SCORER

Names of Stages	DISTANCE		Rivers.	Remarks.
	<i>Inter- mediate</i>	<i>Total</i>		
	Miles	Miles		
1 Shangoek				
2. Bangatah				
3. Nostaakan	15			After 2 hours pass little Bangatah a small village consisting of only a few huts and situated on the same stream. The route takes an easterly direction to the Lawa stream which it follows for a few miles. After this commences an ascent very gradual at first but which soon becomes difficult in some places nearly precipitous, until reaching Nostaakan a halting place on the top of the hill 1500 feet above sea-level course north north east.
4. Thayet pen dukat.				Three and half hours a tiresome march. The road which is very bad but could be easily improved lies in a north north easterly direction over a hill 4000 feet high where there was a lovely view of the Pegu plains to the westward.
5 Thailan zayat.				The road for the first two hours over a succession of hills, until we came to the summit of the Konk taga (stone gate) which is 3200 feet above the sea-level. The place is a very narrow defile between two high rocks densely wooded on both sides and was once held by the Karen against the Burmese troops with success. Leaving this the descent led for a short time through thick jungle until it reaches a small stream which it follows for 10 miles when suddenly turning over a small hill it enters the Thailan zayat situated on the banks of a stream of the same name where the Shan caravans generally halt. It is surrounded on all sides by woody hills.
6 Lomatee stream.	21			The road at this stage greatly improved. No steep hills to cross only now and then a few small ascents until arriving at the plain at the opposite end.
7 Yoon zaleen stream.			Yoon zaleen fordable in dry weather but rises 20 feet during rains	Road over hilly undulating country well wooded the last mile through thick elephant grass at the end of which it suddenly reached the Yoon zaleen stream, which it crossed. This stream in December is low and easily fordable. Camping ground latitude 16° 33' north longitude 97° 8' east.
8 Camp				Direction north north-east Road much the same as usual; nothing but one succession of hills some very steep and difficult to ascend—one, the Kayeen taung, 3951 feet high some of the hills partially cleared where the Karens cook their rice. Camp on hill side.

Route No 39—contd

From Shway-gyen to Mandalay—contd

Names of Stages	DISTANCE.		Rivers.	Remarks
	Inter-mediate	Total		
	Miles.	Miles.		
9 Pah-choung			Pah-choung between two high hills ford	Cross several hills at first starting. Road not much frequented except by the Karen joining from hill to hill. Their houses generally built near the top in the belt a spot that cannot be seen from the road. The road is too bad as nearly the hills not being so steep or high. After 8 miles a precipitous descent to the Lah-chung hills near the Road capable of being much improved. Cross the Pah-choung
10 Trehan				Some tire some hills at first. Tarelay the highest 350 feet above sea level from thence descend by very winding path gradually to the Trehan. No water a little food for the cattle. The features of the country are fast changing a good deal less jungle and trees stand out more open a good deal of paddy cultivation in the hills around Tarelay. Direction east distant 10 miles but the road is so very tortuous that the distances in a straight line is probably only three or four miles from the Pah-choung. To the northward is a high prominent hill called by the Burmese the Lah polo
11 Nga choung	9			The road commences with a steep hill and descends in the other side to the valley of the Nga-choung very fertile and green. The road is very winding along the foot of the hills for some 3 or 4 miles, arriving at a house which it crosses direction east camp on bank
12 Kyon choung				Road follows the course of the Nga-choung which it crosses in the center of the valley and then suddenly turns off in a different direction through a narrow ravine. The hill rises to the top of the hill and then descends to the opposite side until it comes to the Kyon-choung camp
13 Kaimay phoo-choung North latitude 18° 00' East longitude 97° 20'				Road much the same as usual but less jungle reaches between the hills a large broad stream by no means rapid, and apparently very deep. It is used in these parts for purposes of less descent as rafts. The road then turns a little more inland and did not again near the Salween till reaching Kaimay phoo-choung about a mile from where it falls but that river. The point when the road first strikes the Salween is close to the Kaimay (large round stone). The Salween near the junction of the Kaimay phoo-choung is ordinarily 30 yards wide and runs at a rate about twice that breadth. Native complaint of fever
14 Halt	8			Cross the Choung. The best bit of road yet met passes near Salween and runs through the same appears the same, Direction N & W
15 Too-choung				The road for the first 6 miles lies in a north-west direction over small hills and undulating ground towards the high hills near Pah-choung at the foot of this hill at first a small stream strikes off in a northerly direction over several hills with a steep descent for about 6 miles till coming to a small stream, along which it proceeds until reaching the Too-choung a fair broad stream not easily forded; camp, march nearly 18 miles

Route No 39—contd

From Shway-gyeen to Mandalay—contd

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Interme- diate	Total.		
	Miles.	Miles.		
16 Fekan	10	0		Road as usual low stunted jungle all the way; some parts very rocky and bad for elephants Direction northerly
17 Halting place	8	0		Direction north Road good, less jungle and more open. Many large tracts cleared for rice pumpkins, &c the unulating foreground are under cultivation from here there is said to be a road on the hills to the westward to Tawghoo Halting place indifferent
18 Keykphogyoc a village.				Road for first 5 miles through a valley with sides under cultivation then across some small hills in an easterly direction. On top of last is a Karen village of 20 houses of bamboo covered with thatch Next four miles over cultivated hills without a single tree into Keykphogyoc village a wretched looking place for the residence of the chief of Western Karennee. The country here has quite a different appearance no jungle almost all the land under cultivation, the fields being merely divided by hedges
19 Halting place				Good road over cultivated hills for 8 or 9 miles; it then descends through a narrow valley and at the end appear the plains of Karennee stretching northward as far as the eye can see and a long way in an easterly direction. At halting place with running water close by food for elephants very scarce
20 Nuay-doung				Road over level country villages scattered all about, with men and women working in the fields After 7 miles arrive at city of Nuay-doung (river hill) which is situated near the centre of the plain with a good many trees growing in the vicinity No food for elephants. Firewood scarce and water bad Two roads here one through Eastern Karennee and the other by Mobyay Camp in fields
21 Halting place	9			About 2 miles from Nuay-doung road crosses stream that divides Eastern from Western Karennee and passes a number of villages. Water very difficult to find Direction northerly
22 Mobyay	12			Direction northerly A good road skirted the hills. The country to east all under cultivation the fields divided with good stone walls pass many villages some with some Karenns After 4 miles the road leaving hill side leads through the plains over ploughed fields close to the town it crosses stream that divides Karennee from the Shan States and entered Mobyay Nothing obtainable in bazaar Outside the walls river 80 yards wide and rather rapid which flows through the town; Encamp here.
23. Pai kone				Road over the slopes at the foot of the hills through a shady wood here there is a stockade separated by the Mobyay river 30 yards wide and crossed by a wooden bridge from the Burmese village The plan of the stockade appears to be an oval about 300 yards long by 150 broad The ordinance consisted in 1864 of one small gun 3 or 5 pounders and a few jaggals. The harvest here is in December

Route No 39—contd

From Shway-gyeen to Mandalay—contd

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles	Miles		
24. Halting place	8			General direction north. Road through low jungles on the edge of the plains passed no villages
25. Wausten choung	12			Direction northerly Capital road over much the same kind of country as last stage a small village on the Waustenchoung stream no supplies obtainable
26. Halting place				Less jungle and more trees and villages from a slight elevation there seem to be a succession of them all the way. Mye stream which meanders through the plain is the only place of importance and that is not large the road passes within a mile of it all the other villages are small. The plain here gets very narrow with the Mye stream running in the centre and the road turns off over a hill on the other side; the plain opened out a broad as ever. A top of banian trees with the river running close in front and a small village to the right form good camping grounds. Baggage can be conveyed from here to Inlay by boat.
27. Young the				Country more open with small villages scattered about; the only one of importance is Maik where there are some groups of pagodas. Road the whole way good, cultivated on both sides, crops of tobacco and groundnuts pass a large market place with a nice sheltered spot. There is a comfortable Zayat at Young-the
28. Inlay				After 8 miles over a good road arrive at Inlay on bazaar days numbers of people come to this place. The principal article that are brought for sale are groundnuts, rice (of a particularly small white kind, much resembling the Bengal rice) only rather hard when boiled, ponies, hilllocks, vegetables, earthen cooking pots, firewood (this is rather a scarcity of this article), tobacco and cotton. Of fruits there are plenty of oranges, limes and lemons and plantains. The Mye stream is said to have no outlet. Inlay would be a very small place if it were not for the Burmese troops stationed here. The stockade is a square of 30 yards protected on three sides by river walls. It is not flat but low and by a deep broad ditch which connects the two streams on the fourth in the centre of the square there is an inner stockade apparently surrounded by a ditch and it is inside this that all the troops live. The river is about 30 yards wide. There are three bridges across the river all close together in a very compact addition. The river abounds in fish which are held sacred by the people.
29. Halting place (Mara-choung)	24			The road flows at the foot of the hills, through thick bamboo jungle, for 8 miles, and then diverges a little to the eastward with the Inlay lake not far off on the right. After passing several small villages and going

ROUTE No 39—cont'd

From Shway-gyeen to Mandalay—cont'd

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter- stage	Total.		
	Miles	Miles		
				<p>10 or 12 miles it reaches a good stream with a kayat, clear to and suitable for a halting place. Immediately after the mountain road ascends and kept winding at the hills for several hours and on the other side had over an undulating plateau richly cultivated. There is a tent in no place very at night but long and tireless. Half way a river is a small oval lake, half a mile wide with muddy water.</p> <p>After mounting the first range there is a good view of the lake and valley of Inlay the lake extending in a northerly direction as far as the eye can reach. On the slope of the hill the country has quite a different appearance from the low hills and high hills of the former stages. Here the country is beautiful and uninhabited all the hills in the high plateau cultivated in many of them separated from each other by nicely cultivated terraces or stone walls every here and there are towers of bamboo trees or clumps of bamboo, where the villages are generally found. The latter part of the road is very good with one or two strong wooden bridges. Direction northerly.</p>
30 Halting place				<p>Cross another range of hills to a small village and 8 miles further another village where there is a small bazaar and a hal kayat.</p> <p>The country much the same as last stage. No waste land to be seen. The roads good and broad with capital wooden bridges over all the streams.</p>
31 Chyon				<p>Country the same but fewer trees and pagodas. Fields all likely kept and separated in many cases by prickly pear hedges. A good kayat here, but water some distance off. Several good pagodas close to village, and the village all in capital repair. The villagers are Shans and detest the Burmese rule.</p>
32 Well of Myeng the doo	12			<p>Direction N N W. Country the same road good. Passes several small villages generally situated in a lump of bamboo or stream or will. The well of Myeng the doo is situated by the roadside, but there is no place for camping but in the road.</p>
33 Lay a yn stream	13			<p>Direction N N W. Country jungle only an occasional cultivated spot. The Lay a yn is a magnificent stream of clear water shade for camp.</p>
34. Yay nan	13			<p>Direction N N W. The road at first leads through thick jungle but soon gets into more open country much the same as yesterday but more hilly. Water everywhere though many bridges and beds of streams are passed that in the run must be of considerable size. There is a tent at Yay nan where there is a small tank of good water and capital feeding for the cattle.</p>
35 Yay zagoon (water fall)	10 or 12			<p>A good broad cart road leads after 2 hours to the Burmese post at the head of the Natik pass, consisting of 30 men stationed here to prevent the Shans from leaving their own country.</p>

Route No 39—concl'd

From Shway-gyeen to Mandalay—concl'd

Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter- mediate	Total		
	Miles	Miles		
36 Daing				<p>Leaving this, a descent commences which, though very gradual at first, soon becomes very precipitous and longer. The path is in some places not more than 5 or 6 feet wide straight down the side of the hill with loose stones at an angle of 60°. Luckily this is for no great distance. Then mountains of rock worn with the usual slippery by mountainous and so it continues in this manner steep than there, all the way. The hills tower all around. Yayagoon is a halting place. There being no room to pitch a tent and the water scarce.</p> <p>Road for first miles worse than last stage down steep slippery rocks with large holes. After this the road got much better leading through shady jungle at the foot of the hill for a short distance and then to a broad stream a better halting place than that selected last night. Still further reached a small village the usual halting place for travellers where there are two very good resting places. The wood makes a shelter and shade about the plains. It is now a level at through rich cultivated fields till it reaches a river of considerable size flowing towards Mandalay. Crossing the river a village called Daing where there is a capital seat on the banks of another stream flowing in a westerly direction from Yunnan at the head of the Nattik pass down to the plains of Burma proper is a descent of nearly 4,000 feet there appear to be a better road by which the plains of the Shan States may be reached. The country all about is well cultivated villages numerous and people well off and industrious.</p>
37 Yay noon	13			<p>Direction N N W Road and country the same all the way. Bridge and plenty of villages scattered over the plain. Jagla is a large and important one of which called Yay noon is a good place to halt at, there being a stream of good water close by.</p>
38 Chantaa	11			<p>Road and country the same. The town of Chantaa is of considerable size with a large river flowing through its centre. The surrounding district is supposed to be one of the best cultivated and most flourishing in Burma proper.</p>
39 Goung bunjee	16			<p>Direction W N W Country the same. Road crosses several large streams, all well bridged. Passes a town of some size where there is a good bazaar; outside the village of Goung-bunjee there is a kayat; bad camping place.</p>
40 Amarapoora				<p>Cross a large stream in boats. Kayats dirty.</p>
41 Mandalay	6			

Route No. 40

From—SUDIYA (in ASSAM)

To—MOGOUNG

Territory —ASSAM

Authority —W GRIFFITHS

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	Interme- diate	Total		
	Miles	Miles		
1 Kedding				4 days
2. Kamroop Putar			Karam Noa dihing branch of the Boree-dihing Kamroop for- dable	1 day The Boree's old village is situated Kamroop Putar is close to the Naga hills; it is a cul- tivated rice tract on the river Kamroop This river is fordable with frequent rapids Petroleum and coal near Putar
3 Darap-kha	12			Direction S W Darap-kha lies at the foot of the Naga hills, nearly opposite Bocoala.
4. Halt.	10			Commence ascent and after 10 miles reach halting place in a valley near a stream. Altitude 883 feet above Budiya Road very winding path good except towards the base of the hills soil sandy in places indurated and resting on sandstone
5 Darap-pauce	12		Darap pauce fordable at head of ra- pids	Halt after crossing the Darap-pauce some parts of the road difficult for elephants. Tree jungle considerable; open places with low grass is the surrounding feature of vegetation the Darap is a considerable stream with precipitous banks but is fordable at the heads of the rapids. Fishes, especially a large kind of barbel abound
6 Kamtee-chuck	12			SSE 5 hours Crossed over hills of considerable elevation about 1000 feet above Kamtee-chick which is 1413 feet above the sea. The tops of hills continue comparatively open. The kamtee-chick is a small stream fordable at the rapids the extreme banks are not more than 38 or 40 yards apart. Descend into river bed and proceed up it some distance before reaching halting place
7 Halt	10			General direction SSE The route lies for 10 miles up the bed of the Kamtee-chick a complete mountain stream in places heavy jungle; but for most part the bed of the river
8. Halt	4		Tuk kaka	Direction SSE Elevation 3026 feet Proceed about 100 yards up the Kamtee-chick thus cross the Tuk kaka, and commence ascent of high hill of 1000 feet. The lower portion of this jungle is covered with tree jungle, the upper open. From summit good views of Kamtee- chick Valley lead into S W by part of Pat kaye range. All the hills have the same feature but their highest points are thickly clothed with tree jungle. Halt at foot of Pat-kaye near the stream

ROUTE No 40—contd

From Sudiya to Mogoung—contd

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter- mediates	Total.		
	Miles.	Miles		
9 Halt	15			Direction S.S.E. Cross a low hill then a torrent, after which commence a very steep ascent which lasts almost all the way to the top of the Patkay range about 3,500 feet. The Patkay are covered with dry tree jungle on the northern side. The place where the descent begins is not well defined at first winding through. After 4 hours descent to a small stream the Namyoou which forms the British boundary. The route follows this for some distance through wet rank jungle and then ascends a low hill from thence for the remainder of the march it descends through dry open jungle till it reaches the damp spongy water and camp in bed of stream.
10 Halt	10			General direction E.S.E. After a short distance the route reaches the real Namyoou or properly Nammalroon and follows down it running and recrossing the stream frequently. The stream is small, the banks in many places precipitous.
11 Khathung kyoun	14			Direction E.S.E. In 7 miles, then east by south down the Namyoou. Pass a small Putar with remains of old buildings. Continue down Namyoou then to some low hills with jungle leave the village of Namyoou to right consists of only 3 houses pass the first cultivated ground here leaving Kan teeh-ek reach more Putars in which houses are abundant. Road which improves here passes remain of a stockade. Hills generally covered with tree jungle.
12 Khusse nyon	13			General direction south. Road proceeds 100 yards up the Kathung river and then strikes off and ascends for some hours the whole way lying through heavy tree jungle. Ascent in some places very steep near the summit the jungle becomes more open and the route continues along the ridge. Then descend 150 feet to an open grassy spot. And descend from there to the Naikaw kyoun; halt at Khusse-nyon.
13 Kullack boom	13			General direction south. Reach the Khusse Kyoun with out any material descent. Thence descent to Namthuga. From there the descent increases. Halt at Kullackboom. From here an extensive view of Hookoou valley may be obtained, elevation 3,270 feet.
14. Namtuseek (River)	10		Namthuwa	General direction E.S.E. Continue descent without interruption to the Loonkarankha stream. The bed of this which is a mere mountain torrent is of sandstone; the route now ascends considerably and shortly after continues an almost uniform descent cross the Namthuwa, along which the course lies for a long time the latter part through wet jungle along small watercourses till reaching the Panglakha, along which it continues for some time. Halt at Namtuseek 1,000 feet high.

ROUTE No 40—cont'd

From Sudiya to Mogoung—cont'd

Names of Stages	DISTANCE		Rivers	Remarks
	<i>Estimated</i>	Total		
	Miles	Miles		
15 Nempian (old Beesa)	18			Road very circuitous; for the first part east by south, subsequently for some time N N E and even north east. The greater part of the route lay through heavy but dryish tree jungle but during the latter half and especially toward Nempian polders or cultivated field increased in number and extent, cross only one stream. Two paths diverge from the one to the other about 2 miles in a southerly direction and not far from Nanta creek Nempian is a stockaded village and a few hundred yards to the north-east of it another called Zabone both are on the right bank of the Namtu room which is a large tree 20 yards broad. The volume of water is considerable the rapids moderate, it is navigable for the largest canoes. On the right bank there is an extensive plain running nearly north and south no part of it seems to be cultivated.
16 Kidding	4½			Direction S & F Kidding on the Sazual a small stream that flows into the Koo room. The road runs along the Tooroon south and a little to the west of south; it then diverges up the Sazual which runs a mile west to east. Near the mouth of the Sazual and about 400 yards above there is another small stream the Ginnaphka both of these are on the left bank of the river on the opposite side and about ½ mile from the village which like the rest is stockaded. Kidding is larger than either Zulun or Nempian. It is on the left bank of the Sazual rapids are common in the Koo-room but are not of any severity.
17 Kullang	13			Direction S & F. After seven miles reach Shellingkhut on the Prongkha Tsal in mail with a slow stream. Then to Kullang path very winding. The country is much less open than that of Nempian and but few polders occur though the track is covered either with tree or megal jungle.
18 Tsalone	10			Kullang is a village of 8 houses, not stockaded. Reach Lamoon in 2 hours and Tsalone in six. General direction south west. Lamoon is a small unstockaded village on the Monckha. Tsalone is a moderate sized village on the right bank of the Nam Tsal. The river is of considerable size with scarcely any rapids, stream slow. The village is situated on a rather high bank. The country continues the same perhaps a little more open. Polders are of frequent occurrence although they are all narrow.
19 Meinwon	17		Nam tena: ford	Reach Meinwon in seven hours. The route for the first two hours lies along the bed and banks of the Nam tena, subsequently over grassy plains intersected by belts of jungle. Country much more open than the day before. To the west low ranges of hills about ½ mile distant occurred frequently. Pass two or three small rivers. The Nam tena continues a large river extreme breadth ranging from 250 to 300 yards.

ROUTE No 40—conold
From Sudiya to Mogoung—conold

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter-mediate.	Total		
	Miles.	Miles.		
				<p>Deepest part of ford 7 or 8 feet. Its banks are either thickly wooded or covered with Kajang jungle. Mein won is situated on a very small stream the Edikkyung. The village is large and well stocked and is divided into two by this small stream. The population about 300. They belong to the Meer people.</p> <p>The are ambur mines in the neighbourhood in a south west direction.</p>
20 Walla-boom	13			<p>Direction: at first easterly changes to south and after 13 miles Walla-boom is reached. Walla-boom is rather a large village of the Namphyet here 50 yards broad.</p>
21 Halting place.	22			<p>On a small tributary of the Mogoung river. Direction: arrive south course at first along the Namphyet, then over low hills covered with dense jungle forming part of the Sudiya boundary of the valley of Lookung.</p>
22 Halting place.	22			<p>On the Mogoung river. Direction south over low hills until the Mogoung river is reached the route then is along its left bank covered with grass or tree jungle.</p>
23 Halting place.	13			<p>Direction S. along bed of river country as before.</p>
24 Halting place	14			<p>Direction S. F. course and country as in last stage.</p>
25	14			<p>Direction S. F. On starting left the Mogoung river, course is rough and over fine open high plains intersected by hills of jungle. On the right bank of the Mogoung river at the junction of the Fuiwkyoung comes a town of two or three miles on a small hill the other at the foot. Both together contain about 30 houses. The inhabitants are Shans. It is a place of some consequence as it is on the route from Mogoung to the Serpentine mines. But it lies some miles off the direct road from Sudiya to Mogoung. From Camien Shwee-doong-kyee a conspicuous mountain bears east.</p>
26 Mogoung	25		Mogoung river	<p>Direction S. F. Course over high open plains and dry woods many villages occur on the route cross the Mogoung river opposite Camien Mogoung on the right bank. The river of same name just below the junction of the Namyeu khyoung; contains rather fewer than 300 houses. Its extent, however is considerable. It is surrounded by the remains of a timber stockade similar in construction to those of Burma proper. The houses are mostly small and wretched. Nothing good is to be found in the bazaar. Pork is plentiful. The best street in the town though of small extent is that occupied by the Chinese of whom there are some 60.</p> <p>The inhabitants are mostly Shans, but there are also some Amamose.</p> <p>Mogoung is situated on a plain of some extent surrounded in almost every direction by hills all of which except Shwee-doong-kyee are low the nearest being about three miles off. The Mogoung river is here about 100 yards wide but much sub-divided by sandbanks. It is navigable for moderate-sized boats, a considerable distance above the town.</p>

Route No 41

From—SUDIYA (in ASSAM)

To—MANCHEE and IRRAWADDY RIVER
(by Dihing River and Phungan Pass)

Territory—ASSAM

Authority—LIEUTENANT WILCOX

Names of Stages	DISTANCE.		Rivers.	Remarks.
	Inter- mediate	Total		
	Miles	Miles		
1 KUAM (Kusan on map)				Boat. Two days from Sudiya to the mouth of Dihing river. This river is very narrow and the navigation tedious. It is more than 100 yards broad. The difference of level between Sudiya and Kusan (which is the extreme limit of the navigable part of its course) is 410 feet of which 400 feet are due to the 20 miles between Kusan and Beygong. Rapids very strong; latitude $27^{\circ} 30'$.
2 Lugo			Dihing fordable twice crossed	Land. Between Kusan and Lugo route winds along Dihing river. On the north bank 2 or 3 rivulets fall in the principal of which is Pakan. The hills on that side are low near the river and are spotted with patches of cleared grounds. On the south side they are at first 200 and afterwards rise to 500 or 600 feet high, and are all clothed with heavy tree jungle opposite the little village of Akher. The river must be crossed in a canoe from south to north bank. There is a small cliff overhauling the river and passing a few fields and much jungle to Lugo, a village of 6 houses and descending to the mouth of the Tungon Fuyon rivulet. At this point the plain terminates on the river is seen to issue from a narrow opening in the north-east. From Lugo there are two routes on the north. Moong hill directly east which from distance is said to have become impassable, and another over a lower part of the hills a little more north. The banks of the Dihing are said to be impracticable.
3 Toonghoo stream.				Ascend the Tungon which is one continued rapid and after proceeding some distance northward turn to the east when the hills usually flat and covered with heavy bamboo jungle. To the north is a very high hill connected with Dapha Loom. In the valley of Phahl and reach the Toonghoo rivulet. Jungle very dense; no clear space for camping.
4 Kumku (or) Koomkoor				The path leads through much jungle as before tolerably level till arriving at the brow of the ridge overlooking the Dapha river. The height of the ridge is an extensive view. There was a very steep descent followed by steepness of narrow plains where are the fields of the Dapha village. Kumku is 1,523 feet above the sea, and is a village of 8 or 10 large houses. The fall of the river between this and Kusan is 683 feet.
5 Pasila			Dapha bridge except during the rains.	Some distance up river is a foot bridge rebuilt yearly; current too strong for ponies. After crossing the river the path returns to within half a mile of the Dihing and ascends the sandstone hills to the village of Pasila on one of the steepes. It is a new village of 6 or 8 houses. There is excellent ground for rice cultivation on the perfect flats of the steepes and for grain requiring a dryer wall they have cleared a part of the hill, where the slope is fully 30° latitude of Pasila $27^{\circ} 30'$.

ROUTE No 41—contd

From Sudiya to Manchee and Irrawaddy river—contd

Names of Stages.	DISTANCE.		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
6 Tumany Zik rany			Dihing	Proceed over hill to eastward with Dihing to right. Descend in same direction and come upon the banks of that river where the little lake falls in. Here on the north a narrow strip of plain stretches along under the hills to Lajong village. Thence enter the jungle where the river winds at the bottom of coniferous hills and does not admit of a pass up along its edge. Opposite to Hkong rivulet is a perpendicular mass of sandstone which necessitates the passage on rafts of bamboo.
7 Camp on Dihing river			Dihing not fordable	Along the banks of Dihing on the plains this river is occasionally fordable but very rough up here. Path along edge and up to be obstructed by large blocks of rock. About half way across and perpendicular cliffs are encountered will have to be climbed over with much loss of time. The river is here frequently described as a star. Camp on a stone bed 1,750 feet above the sea.
8 Camp				Leave the Dihing entirely ascending a hill immediately on starting. Tree or bamboo just at the whole way. Direction nearly a right-hand and proceeding obliquely upwards as if a high range the summit of which is to be reached. Path is not as an ending and descending camp 2,825 feet above the Dihing.
9 Hollow Tree Camp			Maha-pani	A steep and winding path descends considerably to the Mahapani and then ascends through a cliff from the north east and west that by comparison a laborious ascent to the opposite mountain. Dense jungle disappears and instead of dwarf moss-grown trees. Camp at an old hollow tree containing water 425 feet above the sea.
10 Camp on Dapha river				Climb another still higher peak from whence is visible the summit of Wanyho. From the path leads round it. This ridge of mountains separates the nearly parallel streams of the Dihing and Dajha. Descending the path arrives at a beautiful little plain covered with short grass and then abruptly rising on either side to a great height. Camp on the banks of the Dajha river. The spot frequented by deer elephants and monkeys. Height 5,431 feet above the sea.
11 Camp on Phungun mountain			Dapha (fordable)	Direction nearly east along the boulders of the edge or in the track of all animals in the jungle then turn long more until after the ascent of the Dajha into two branches cross the foot branch (15 yards) and commence ascent up great pass. Camp 7,351 feet above sea.
12 Camp on Phungun river				After an hour's ascent reach the level of snow on opposite mountain. Trees growing in all directions both beach and land being the middle. After reaching the snow a very beautiful path descends to the Phungun river of considerable size.

ROUTE No 41—contd

From Sadsya to Mawkes and Irrawaddy river—contd

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter- mediate	Total		
	Miles.	Miles.		
13 Camp			Phungun (fordable)	Descend down Phungun pass. Leeches and dam dams very bad. Through thick jungle of trees and prickly pointed bamboos occasionally come out on the Phungun. Cross 5 or 6 rivulets which join the Phungun, having their origin in the snows on the right bank. Halt on hill.
14. Camp				Path better but confused in a narrow ravine between two high mountains. Cross the Phungun to north bank. Halt at a little rivulet falling into Phungun.
15 Camp				Fatiguing march over a steep hill at the bottom of the opposite side there is a small rivulet. Thence after ascending and descending 3 more hills reach halting ground.
16 Aleth			Namsai	Descend to the Namsai river which appears to rise in the Phungun Bhum near the pass, and runs parallel with the Phungun both rivers flow into the Namlang and the distance of their mouths is less than a mile. Bamboo and tree jungle. The path owing to the thickness of the jungle is towards the end of this march altogether lost. Halt at the deserted village of Aleth situated at the junction of the Namsai with the Namlang.
17 Camp on Namlang			Namlang (fordable)	Path must be cut through jungle to the Namlang. It is 30 or 40 yards broad running with a slow broad current excepting when a rapid here and there occurs. Proceed almost due north along the edge and sometimes in the water to some perpendicular cliffs and then through the jungle above which is very full of leeches. Encamp near the banks of the river.
18 Village of Namlang				The path leads chiefly along the edge for the water and over steep and slippery rocks still an unvaried aspect of dark jungle the direction since leaving Aleth nearly due north. Ford the river here nearly 100 yards broad. Cross again (if not fordable). Beyond the first crossing place the country opens out into a narrow valley which leaves a small plain at each alternate bend of the river. No signs of habitation but leaving the right bank and passing through a narrow belt of jungle, a cultivated plain of a mile or two in width is reached. Halt at a village of 20 or 30 houses.
19 Nambak				Nambak a Munk village, situated on the Nambak rivulet and fortified with a strong palisade. Intermediate plain cultivated with a good path through it. Pass a village on road.
20 Kumtong			Namlang (bridged)	Kumtong the Pahmarup, is a short distance from the Namlang which is crossed by a rude bamboo bridge the river below running at the rate of 1 mile an hour. On the opposite bank the path passes over some high ground and there enters another small plain surrounded by low hills, some of which is cultivated. The village of Kumtong is situated in the middle of the plain on the Kumtong stream.

Route No 41—concl'd

From Sudiya to Manchee and Irrawaddy river—concl'd

Names of Stages	DISTANCE.		Rivers	Remarks.
	Inter- mediate	Total		
	Miles	Miles		
21 Manchee			Kumtaung (fordable)	<p>Cross the Kumtaung and ascend the hill separating the Naulung from the plains of the Irrawaddy. The path is well beaten. From the west of the hill the Irrawaddy may be seen in a large plain in the distance. To the pass succeeds a long narrow level gradually expanding towards the plain. No sign of residence of men till a large cultivated tract is reached. The path passes the large tomb of some great man, two or three temples, and in the left the strongly stockaded village of Chikpian. At last entered Manchee.</p> <p>The town is built on a large and fortified with a high palisade lat. 27° 58' 0".</p> <p>Three miles from Manchee is Phankatl. The road is over a level plain partly cultivated and studded with clumps of trees and bamboo. Phankatl is also strongly stockaded and an interior palisade surrounds the Rajah's house.</p> <p>From here cross the plains to the Irrawaddy river; it is here 80 yds. broad and still fordable, the bed is of run and wet mud and slate and low there are numerous rajahs. The plain is covered with low grass and crossed in several places by belt of tree jungle which make watercourses during the rains. Elevation 1,800 feet above sea.</p>

Route No 42.

From—THAYET-CHOUNG

To—PONSIKAY (in SIAM) (via Chouk-hton and Aungmye)

Territory—BURMA AND SIAM

Authority—CAPTAIN J HILL, R.E.

Names of Stages.	DISTANCE.		Rivers	Remarks
	Inter- mediate	Total		
	Miles	Miles		
Thayet-choung				Thayet-choung is a well known village situated on the left bank of the Tavoy river, on the Tavoy and Mergui road and about 18 miles south of Tavoy.
1 Toung byouk village Height=100 feet.	20			<p>General direct on S S F and E S F.</p> <p>The route from Thayet-choung follows the Mergui road for about 10 miles to the village of Pynboogyee. It then leaves the Mergui road and passes over flat ground which is highly under rice cultivation and completely flooded during the rainy season. Before reaching the end of the march at Toung-byouk the Soungiang and Toung-byouk rivers have to be crossed and the whole march which is not a difficult one occupies about 9 or 10 hours.</p>

Route No 42—contd

From Thayet-choung to Ponsikay—contd


Names of Stages.	DISTANCE		Rivers.	Remarks
	Inter-mediate	Total		
	Miles	Miles		
				<p>The village of Toung hyonk is divided by the Toung-hyonk river. It also has another division one part being inhabited by Burman and the other by Karens. It is a very scattered village extending over a large area, and contains altogether about 50 houses. Supplies for the march if not already procured should be laid in at Toung hyonk. The route proceeds from encamping ground to encamping ground and there are no villages between this one and Khyonk hton.</p>
2 Toungkeen encamping ground Height = 610 feet	15	35		<p>General direction F.S.E. The route for all the miles passes over very easy and open ground after which it flows a watercourse called the Toungkeen-choung the hill tops on either side of which are quite small and very heavily wooded until Toungkeen encamping ground is reached. It is situated at the junction of two small streams, which combine to form the Toungkeen-choung and at the spot where the steep ascent to the Tatodoung pass begins. This is an easy march. Time occupied on march about 8 hours.</p>
3 Thabyoo choung encamp- ing ground Height = 1150 feet	5	40		<p>General direction N.N.W. and F.N.E. The route is much the same very steep ascent from the campsite to the first low pass at Tatodoung which occupies about half an hour. From this there is a short drop to a small hill stream where the ascent to the main pass begins and after a short but very steep climb the main pass proper is reached. From the pass the route is a difficult descent to Talayoo- tong a small village situated on the left bank of the Talayoo- tong river. Although the march is so short it is very difficult for laden elephants, and is likely to occupy the whole day.</p>
Tatodoung first pass height = 1810 feet Main pass height = 2140 feet				
4 Padat encamp- ing ground Height = 800 feet.	10	50		<p>General direction S.W. The path descends passing a waterfall where the Thabyoo stream joins the Padat stream and continues along the wooded terrain by a well marked route until the encamping ground (which is on the left bank) is reached. Time about 7 or 8 hours.</p>
5 Khyonk hton village Height = 860 feet	10	60		<p>General direction S.E. The route continues along the Padat stream and after about 5 miles reaches a small flat bank where there are a couple of huts some a palm tree, and a little hill where rice cultivation. About the same distance further on the stream empties into the Bean river opposite the village of Khyonk hton at which this march ends. Time about 6 or 7 hours. Khyonk hton is a village inhabited by Karens and fuel taken from Sum, two or three houses of which are found along the river and actually in the route others may be found. The route is fairly good, but the hills are steep and the water is very much in the way. The hills are steep and the water is very much in the way. The hills are steep and the water is very much in the way. The hills are steep and the water is very much in the way.</p>

ROUTE No 42—contd

From Thayet-choung to Ponsikay—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter- mediate	Total.		
	Miles.	Miles.		
				<p>Tenasserim river. During dry weather the Beas river of white Khayouk hton is fordable and only 84 feet wide; but with rains it is impassable as the rapid flood of great width. The river rises very rapidly and under-estimated and its party who are retreating from Siam in 1940 were the first halt for 10 days in the middle of April at Khayouk hton. The Japanese could not enter the river until the water had abated and efforts to escape down to Mitalia means of raft were in effect. The water rose of the night and carried away the raft which had been prepared. A village is met with between Khayouk hton and Aiyay the route proceeds as follows from encamping ground to encamping ground.</p>
6. The Choung-jai or Thama banji encamping ground. Estimated height = 1,600 feet.	8	68		<p>General direction N N E. The report is that an easy march in fine weather the route being relatively flat. In the morning a low river found the river bed still in wet weather. The path lies through the hills with a narrow strip of water could be crossed with the stream of the river in the deep mud. At the end of the march the path crosses a small range and arrives at a small camp at the encampment which is on the left bank of a stream which flows to the northern branch of the Choung-jai and which flows in a small river into the Phrayayouk hton village. The Japanese march on to the left and although the route is a long one and the march took 7 hours 40 minutes to accomplish it in wet weather.</p>
7. Tonngueung encamping ground. Height 1,750 feet.	7	75		<p>General direction F. The route is not flat in all weather a difficult march through the hills in the morning the route is dry in water in the afternoon it is very wet. The encampment of Tonngueung is at the Choung-jai hill in the south-east branch of the Choung-jai stream. Time 4 hours.</p>
8. Choungwa-phyia encamping ground. Height 2,320 feet. Khayoungwa hill crossed over. Height = 3,600 feet.	7	82		<p>General direction N F. The route rises to a steady ascent of about 1,850 feet from Tonngueung and passes over the Choungwa hill which is the highest point reached on the route. From this point the path descends through grass and which had on been a forest of tall oak trees. The route is a wet one with low ground until it arrives at the Choungwa-phyia stream where the march ends. The Japanese march for 7 hours and occupies about 7 1/2 hours.</p>
9. Kiku swamp encamping ground. Height 2,440 feet. 1st pass. Height 2,880 feet.	11	93		<p>General direction N and S F. The route falls gently for about 3 miles keeping to the stream and then doubles almost to the opposite direction upon another branch for about an equal distance when it arrives at the first of the first pass of the Kiku hill. The route is a wet one and it is still in the encampment on the hill. After a steep climb a pass is reached, from which the path falls for a short distance to the second of the second pass. The route slopes down the hill and enters a small ridge until it reaches a small valley near the top of Kiku hill is reached where the</p>

ROUTE No 42—*conold**From Thayet-choung to Ponsaikay—conold*

Names of Stages	DISTANCE		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
10 2nd pass Height 2 720 feet. Motho on camping ground Estimated height= 600 feet. Motho ridge Height= 3,280 feet.	8	101		<p>drainage from the peaks collects into a swamp forming the source of the Kiku Choung. Here is the encamping ground which is very damp. The marsh is severe and occupies 9 or 10 hours.</p> <p>General direction N N E and E. by S.</p> <p>From the foot the path rises still further for a couple of miles, and after crossing the Motho ridge descends steadily for about 8 miles until Motho encamping ground is reached. During a portion of this descent the first view of Siam is obtained, the frontier range not being sufficiently high to shut it out. This march is an easy one for a pedestrian the baggage however is unlikely to arrive earlier about five hours from the time of starting the elephants. Water is found a short distance below the encamping ground.</p>
11 Amya village Height at houses on right bank=300 feet Amya village Height at houses on left bank 300 feet.				<p>General direction E by S.</p> <p>The route continues down hill for a couple of miles or so, and then continues along and almost level with valley to Amya a village which now consists of only about ten houses about half of which are situated on the right bank of the Trusmi river and are inhabited by Siamese while the remainder on the left bank are inhabited by Karen. The Siamese of Amya appear to be in contact of communication with Siam, continually passing between and forward across the frontier and are decidedly suspicious characters. This is an easy march and occupies about 4½ hours.</p>
12 Amya Pass encamping ground Height 1 970 feet	11	121		<p>General direction east by north.</p> <p>The path to the pass is a bad one. It follows a water-course full of great boulders nearly all the way the worst part being about midway. The encampment is on the pass at a spot where a tree marked thus  indicates the boundary between British and Siamese territory and water is obtained from a spot in the ravine on the western or British side close to the encampment and actually on the path up to the pass. This is a very difficult march for laden elephants and occupies 9½ hours.</p>
13 Ponsaikay Siamese guard house Height 350 feet.	5	126		<p>General direction east-by-south.</p> <p>From the pass to the guard-house the road is excellent, the descent being gentle and through a wooded country without undergrowth which forms a striking contrast to the dense forest jungle on the British side. Between the pass and Ponsaikay the ground could easily be made practicable for country carts. At Ponsaikay the cart tracks begin and there is no difficulty in travelling about with elephants or carts in the flat open jungles of this part of Siam. The guard house is the only building at Ponsaikay. It is constructed of wood with a thatched roof and stands in a small enclosure formed by a stout palisade about eight feet high the gate of which is supposed to remain closed except when giving passage to or from the guard house. About half-a-dozen Siamese police are stationed here. Good water is obtained from a stream close by.</p>

Route No 43

From—THOUNG-GYEN RIVER

To—ZIMMAY

Territory—SIAM

Authority—

Names of Stages.	DISTANCE.		Rivers.	Remarks.
	<i>Inter-mediate</i>	<i>Total</i>		
	Miles	Miles.		
7 Thoungeon (river)				This is an alternative route to Route No. 28.
8 Kara way Toung				8th day
9 Pwet Sakhan				9th day
10 Koon Myoung Choung				10th day
11 Mai Ngan Choung Thab-yoo bin Sakhan				11th day
12 Mhine loon gyee Choung Thoung loon gyee Sakhan				12th day
13 Maikan Choung Sakhan.				13th day
14 Mhine loon gyee				14th day
15 Maisalin Choung				15th day
16 Mailit Choung				16th day
17 Maisallee Tee Foot.				17th day
18 Bawgee				18th day
19 Kyouk Mogo Sakhan				19th day
20 Mobouk				20th day
21 Bim may Sakhan Kyong loung				21st and 22nd day
22 Lay Taw Sakhan				23rd day
23 Zimmay				24th day

Route No 44.

From—TOUNGOO

To—MYIN-GYAN (via Yenay-then and Hline-det)

Territory—BURMA

Authority—WATSON and FEDDEN

Names of Stages.	DISTANCE		Rivers	Remarks
	Inter-mediate	Total		
	Miles.	Miles.		
1 Lay-doungan	8			General direction little west-of north up the west side of the valley of the Sittang. Road for first 4 miles swampy. For next 3 miles through paddy fields along the banks of a stream by means of which the surrounding cultivation is irrigated. After passing through a small patch of jungle reach another extensive paddy plain on the extremity of which is the halting place. Water indifferent from a tank.
2 Toung myo	10	18		General direction and country as before. Road good the whole way. Pass Nat Yay-don at 6 miles. Here there are good Zayats and water. Ditto at Shevé-kay root, 2 miles further on. Halting at the head-quarters of a Thoogyé. Here the Zayats and water are very bad.
3 Thagarah	12	30		General direction rather east-of north. Road winding and very sandy but good, walking heavy. Met several lightly laden carts from Yamouhen Ningyan. About 4 miles from Toungoo the Hwa khyoung is crossed, a broad stream with steep alluvial banks and a short distance beyond the road passes under a grove (i.e. depressions in the surface). This undulating sandy country extends westward to the foot of the Pegu Yoma hills distant about 15 or 20 miles which to the east of the flat paddy land pride out to the base of the high range beyond the Sittang river. There is no good halting place on the road except at the crossing of the Hwa khyoung.
4. Myo-hla	8	38		Direction and country as in last stage. Road very good the whole distance. Myo-hla on the Sittang (or as it is then called the Poang loung stream) is our frontier village; here are stationed 30 policemen under a head constable. They live in a small bamboo stockade about 50 yards from the river bank. The houses in it are all thatched and the stockade itself is constructed of inflammable material. Myo-hla is 4 miles short of the boundary pillar.
5 Mye-be-yah Kang	9	47		Pass a Police outpost at 3 miles. This is a small stockade similar to that at Myo-hla; at this spot strength of guard 10 men. Rather more than a mile from the outpost is the first Burmese outpost called E-m-ben-yay-dwet; crossing a small stream and its valley the road ascends to a plateau of fine white sand with occasional patches of gravel.
6. Thon-doung choung	9	56		The road turns to the west and north west over undulating country. Sandy waste land, still within a short distance of the halting place on the bank of the Thon-doung stream a tributary of the Sittang; here is a low level fertile land that extends along the banks to the main valley.

ROUTE No 44—contd

From Tawngoo to Myin-gyan—contd

Names of Stages.	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles	Miles		
7 Nyngyan	9	65		<p>Direction north north-east. The road from the frontier to this town passes through extensive fields of rice and teak. The soil is very sandy and for the most part under rice cultivation. The road though perfectly dry in December is evidently in some places 2 or 3 feet under water during the rain. Large quantities of fine teak timber near the town prepared for floating down. The town of Nyngyan was about 15 years ago moved from the north to the south and higher bank of the Kyauk Kyet stream in consequence of the other bank being completely flooded during the rain. The town consisted of 800 houses. The streets are laid out after the manner of all large Burman towns. The Kyauk Kyet is a very broad bedded stream but in December the water is quite shallow; about 6 miles down it joins the Tau Thye or Serry Myo a larger stream that flows into the Sittang at Tau thay wa nya. The Kyauk Kyet Khayoung divides the districts of Myin-gyan and Yamothan.</p>
8 Chee-doung an	10	75		<p>Direction northerly passing over or skirting along the boundary of the Indian ground. Now and again a swelling on to the flat alluvial soil. The hills to the east appear much lower. The first range I said to be on the west side of the Sittang river. The Paga Yoma to the west are almost lost in the distance. The road throughout good for carts. Cultivation very scarce. I saw only a small village on the road called Mili-pya Kyau. The Zayats at this halting place is very numerous and well built. Water is scarce and obtained by digging small holes in the bed of a dry <i>sala</i>.</p>
9 Shway Myo Zayat.				<p>On reaching Shway Myo the Trenthor Shway Myo is within 1/2 a mile to the right and a few miles in front where it is running from the west over a broad sandy bed. It is easily fordable. At the Shway Myo Zayat the nearest water procurable is from the stream; from here there are two roads to Yamay then. The western one though longer is the best as carts cannot always go by the eastern one.</p>
10 Kywon pin Kon	12	87		<p>Direction west of north. The country being more fertile is more populous and the villages are larger and very numerous. At Kywon pin Kon there is a fine Phoongye hwa Pagoda on a hill. The inhabitants obtain their water from a small tank which is scarcely drinkable, better obtainable from the Nawin Choung 1 mile distant. The village of Ming Yua on the eastern road lies about 3 miles to the south-east. Here there are two large Zayats and a large stream of water 1/2 mile beyond. Kywon pin Kon is the large village of Oung Kyau Kon.</p>
11 May-oung gan	10	97		<p>Direction to the west of north. Pass several large villages. The country round them is pretty undulating sandy ground with open bushy jungle and hort dry grass cultivated only in patches but more especially on the argillaceous soil bordering the sandy ground and in the vicinity of the water course. This is an excellent halting place with a fine new Zayat and a large tank of water.</p>

ROUTE No 44—contd

From Toungoo to Myin-gyan—concl'd

Names of Stages.	DISTANCE		Rivers	Remarks.
	<i>I</i> <i>ter-</i> <i>mediate</i>	<i>Total.</i>		
	Miles.	Miles		
12 Yamay then	8	105		<p>Over a plain scattered with trees and bushes and cultivated with rice except to the eastward where it is marshy and nothing but sedge grows. This low swampy part is hundred acres near the town, forming a tank or pool 3 miles in length. The bund at its greatest breadth is more than a mile long.</p> <p>The town of Yamay then is enclosed within a stockade surrounded by a neglected moat. There is one very broad main street running through from the north to the south gate, nearly a mile in length. The great plain round Yamay then is about 10 or 12 miles across and widening towards the north extend up to Mandalay or at least to the valley of the Myit-Ngei. The site of Yamay then appears to be the water parting between the valley of the Irrawaddy and Sittoung rivers at an altitude of 400 feet. There are three roads from Yamay then into the Shan States, the middle one and best which is described elsewhere (Yamay then to Thien see No 48) also a good cart road to Magway on the Irrawaddy 5 miles to the west.</p>
13 Hlinc-det-Myo	30	135		<p>General direction north. Two days' march over an apparently extensively cultivated plain.</p>
14. Myin Gyan	70	205		<p>Hlinc-det-Myo is 5 or 6 days' journey from the Irrawaddy; the road down to the river passes in a north west direction to the town of Myin-gyan about 10 miles north of Isgan. The first part of the road is across the flat alluvial plains. The Namong Khyoung is met about 3 miles from the town (Hlinc-det Myo). It is a shallow bedded stream and dry during the hot season; it drains from the south and is said to join the Myit or Panbuang. When about 10 miles from Hlinc-det-Myo the road passes over a very slight rise of sandy grounds and 8 miles further it leaves the plains and proceeds onwards through a pretty undulating tract of country composed of sand, gravels and rocks. After passing the watershed a low anticlinal in this ground, an extensive view is obtained to the westward, and the lofty hill of Paopa now makes its appearance a long way off to the west-south west. Many large villages and towns are seen and the road in its descent towards the river passes through several all of which are well fenced round, and the compound and roads fenced in with cut thorn bushes and briars. Within the large villages there is generally an open space or bazaar for bazaar carts &c. &c.</p>

Route No 45

From—TOUNGOO

To—NOUNG-PALAY

Territory—BRITISH BURMA, KAREN-
NNE

Authority—INDIA OFFICE

Names of Stages.	DISTANCE		Rivers	Remarks
	<i>Inter- mediate.</i>	<i>Total.</i>		
	Miles.	Miles.		
1 Paday	12	12	Sittang ford <i>opposite</i> Paday or 0 miles from Toungoo	The road passes along the right bank of the Sittang. The country is level for the first part covered with lush and later on with true jungle. The river must be forded at either Shanung about 6 miles, or opposite Paday.
2 Ngamwai Zayat	10	22		The road follows the left bank of the river for a short distance through the jungle with thick undergrowth. It then makes a bend to the east and passes over undulating sandy ground strewn with boulders. The high ground is thick with cone trees, whilst the low part are filled with bamboos, jungle trees, &c. Several streams have to be crossed and there are a few short cuts. Ngamwai Zayat lies on the bank of a clear mountain stream.
3 Lepeteng	6	28		The road which here degenerates to a mere path, ascends the valley of the Kayu stream ascending and descending the small spur of the hills which close it in. During the first part of the march the country is covered with trees & forest then with bamboos and bush. The hills are steep and have narrow valleys with small water races between them. The top of the ravine is reached after a stiff ascent of 2,300 feet. The road now improves into a track 8 or 10 feet wide cut through the jungle and descends 780 feet to Lefutung the head-quarters of the Toungoo hill tracts situated in a little valley and some rice cultivation. It contains a police station and there is a bamboo stocked in a bar knoll. From this place there are two roads which enter Karen-nee the one 7 miles north west of Noungpalay and the other 7 miles south west of that place.
4 Naga pwa- daw	8½	36½		Road as before over a succession of hills in an easterly direction. In the intervening valley are small streams with steep banks. The country is covered with thick jungle. Road very badly traced. A few Karen houses seen from the road. Tsakhan in narrow valley of Naga-pwadaw stream.
5 Thowkya- gat	8	44½		Road same as in last stage—over a series of low hills and finally by several short but steep descents reach the Thowkya gat, a wild stream 40 feet wide and 2 feet deep with a pebbly bottom. Soon after crossing it the road reaches the police station the last one in this direction by a short ascent.
6 Kaw Saw Stream	8½	53½		Continuing to ascend the road passes through tree forest and bamboos for some 100 feet, after which it descends to the Kie stream. The track then continues up this stream which it crosses several times. The bottom is pebbly. Leaving the stream the track gradually ascends the south side of the valley, 1,500 feet higher up it re-crosses the stream to the north side and continues up it to the top of the hill some 350 feet more. Thence the road descends at first steeply to the Kaw-saw stream. It then turns up the open valley of this stream which is about ½ mile broad.

ROUTE No 45—contd

From Toungoo to Nong palay—contd

Names of Stages	DISTANCE		Rivers.	Remarks
	Inter- mediate	Total		
	Miles	Miles		
7 Htoo-Choung	6½	59½	Htoo stream ford	<p>and under rice cultivation and shortly after reaching the camping ground on the banks of the stream which is here 15 feet wide and sluggish. The hills enclosing this valley are called the Gamong; they are from 400 to 450 feet high. The inhabitants of this valley are called Braya. They are a very numerous tribe and every man is armed with a match lock or spear.</p> <p>The road lies across the hills on the east of the valley which vary between 350 and 450 feet. From the summit more wooded parallel ranges are visible beyond. After descending to a connecting saddle the road ascends to 400 feet and then descends once more 1,700 feet to a narrow valley only 20 yards wide, where there is small stream and rice cultivation. Following down this valley and out at its southern end where there is a narrow gorge there is a small flow into the Htoo stream, a tributary of the Salween which is here about 10 yards wide and 1 foot deep with a rocky bed. The valley is occupied. The country is inhabited by the Kachin tribe of Karins the men of which are all armed like the Braya.</p>
8 Camp of Tsamony range	3½	63		<p>Shortly after leaving camp the road turns up the stream a tributary of the Htoo. It then makes a rapid ascent of 1250 feet up the spur of a hill. Next succeeds a level bit and then another ascent of 1,500 feet up the spur of a hill. At successive level bits at 1100 and 1250 feet. From this point the road descends 700 feet to a stream and re-ascends beyond it 700 feet to the camping ground. Thick jungle all the way. Water supply at camp very bad.</p>
9 Swaree village	8	71		<p>At starting the road gradually ascends 550 feet first through forest and then through bush and high grass. The tops of the hills are round and covered with grass and dotted with cocones and scattered trees. Hence there is another ascent of 900 feet to the tops of the western rim of hills. After that the path leads for a time through bamboo and then among trees.</p> <p>After descending some two hundred feet, a saddle across a valley running north and south is reached and the path then follows a spur and down a hill side overlooking a wooded valley on the south. This is succeeded by another ascent of 1000 feet up the Lunnako peak. The descent on the east side is through park like scenery to the Tadawlot stream 750 feet below from this stream the path leads through a wooded and then over gently undulating country with occasional patches of cultivation. The fine trees seen here are said to be useful for out-door work. After a while a descent is made down a spur into narrow valley. Crossing this it ascends over a small steep hill and enters another valley. Beyond this the country is more bare and the hills smaller and more rocky. The camp is situated in a narrow valley 100 yards wide with cultivation between Swaree village and the village of Fawho. A small stream supplies the water. The hills on the east are rocky and steep, those on the west intersected by numerous small valleys.</p>

ROUTE No 45—*conold**From Toungoo to Nong-palay—conold*

Names of Stages	DISTANCE		Rivers	Remarks
	<i>Inter-</i> <i>med at</i>	<i>Total</i>		
	Miles	Miles		
10 Meeloung choung	8	79		Ascending some 500 feet the path crosses the hills to the east. They are a succession of steep hills and valleys. The path is partly through grass and partly through low wood. The stream to Karmnee is down a narrow valley between rocky hills. In fact it is visible a highly cultivated plain intersected by rocky ridges. There are plenty of small waterfalls and ditches. There is a camp in the valley. The stream near the camp is so full with slugs and muddy. The camp is situated at the foot of the valley. Large herds of cattle in the neighbourhood.
11. Nong palay	7	86		Direction N E. Road level through cultivated enclosed land. The place is near the halting place between Nong Doung and Karmnee. A village on the road from Shawgyeen to Mandalay.

Route No 46

*From—YEMAY THEN**To—THIEN-NEE**Territory—BURMA**Authority—WATSON and FEDDEN*

Names of Stages	DISTANCE		Rivers	Remarks
	<i>Inter-</i> <i>med at</i>	<i>Total</i>		
	Miles	Miles		
1 Thayet-myong	10			For the first three miles pass along paddy fields to the large village of Twingong, inhabited mostly by Shans. This is a great emporium for bullock. The remainder of the road passed over mainly good rocky ground, the cultivation consisting of two or three small Townships (hill country). Having wound for three miles round the hill, the road falls to a small stream, where there is a comfortable Zayat. No view is obtained from here, the hills closing in on all sides.
2. Nankwai	8	18		Direction N E. Ground at first irregular and broken. Ascent becomes steeper and rocky. After an hour's hard climbing arrived upon a tolerably level spot of ground, with a good soil, cultivated in part. Continuing on a gentle descent along the side of a hill having already crossed one watershed for the stream on this side runs into the young-loung the road goes winding among hills making a gradual descent into a vale of some breadth laid out in small paddy fields and gardens. Here and there are two or three small villages or collection of houses, a pagoda and a "Kyong"; this is a good halting place called Nankwai.

Route No 46—cont'd

From Yemay-then to Thien-nee—cont'd

Names of Stages.	Distance		Rivers.	Remarks.
	Inter-mediate	Total		
	Miles.	Miles		
3 Nyoung-chee donk.	8	26		<p>This valley runs from north to south and is enclosed by a steep hill on the west side but undulating ground with grass and bush on the east. The elevation is about 2,000 feet above sea level. The traffic in these parts is carried on mostly by pack bullocks. The road ascends very undulating hilly ground and along the south side of a very steep hill descends into a valley, crosses a small stream of water and ascends again first at a fairly steep then more gradually along the top of a ridge. The road then ascends a spur to north-east and north with deep valleys on either side after descending and ascending along the top of a ridge to a high point. Leaving this high point the road descends considerably and then re-ascends to a still higher point (above 3,000 feet).</p> <p>From this it descends again rapidly eastward; having gone down a considerable depth it passes along a level hill to another hill where it ascends, and proceeding along the crest reaches Nyoung-Chordouk distance as the road now lies probably not more than 4 or 5 miles. Road in many places blocked by the overhanging branches of trees under which the bullocks can pass with ease but require to be cleared away for elephants. Water at camp very scarce and nearly a mile distant. No sign of habitation on this march.</p>
4. Sittang river	6	32		<p>Descend slightly at first and after about a mile ascend the Loma range 3,500 feet then after several abrupt ascents and descents reach the junction of two small hill streams. Following down the streams formed by the junction of two streams in an easterly and north-easterly direction through a thickly wooded valley for about 3 miles when the stream turns more to the south and shortly joins the Sittang river. The road goes on in an easterly direction over a small hill and soon descends into the valley of the Sittang of Pounng-loung, here 25 or 30 feet wide and running from the N.W. No signs of habitation on the march, though there are a few old hill clearings in the distance. The camping ground is a side way up the right bank a small level spot with high hills on either side. Distance in a direct line probably not more than 4 miles.</p>
5 Twin-doung	5	37		<p>The Sittang though fordable by cattle may be crossed by a very rickety bridge of bamboo. The road directly from the left bank ascend up a steep hill eastward, and it is a hard climb of 15 minutes to reach the top; continue to ascend in a direction nearly south-east along a ridge with steep valleys on either side. To the left across the valley is a high jagged range running nearly parallel to the one the route travels. Having passed the highest part the road descends the side to eastward and goes along a spur or branch of the first range ascended. It apparently connects with the other high jagged one. Now it ascends along east side of hill or spur and reaches a narrow connecting part where the Pounng-loung can be heard noisily rushing down in the valley below. Ascend the hill to east and continue ascending steeply to east-north-east along its brow going towards the high rocky range. The stream is still heard in the valley below but with crossing it the path enters a sort of gorge or pass and proceeds up a dry water course to the S.E.; here there is much limestone about; the ground is red clay with gravel, but continuing on in a straight line down a dry watercourse it passes rugged masses of limestone traversing up on either side, and the soil here is a rich black loam. The road goes</p>

Route No 48—contd

From Yemay then to Thien-see—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter-mediate.	Total		
	Miles.	Miles.		
5 Tsin-doung— contd				<p>S. R. W. for a short distance between high hills, as before but now more open then it turns south-east, continuing on a level then ascends gradually east 15° N. the side of a gully following up a rocky watercourse it shortly descends again still bearing east in this vale or gully and soon comes out into no open grassy sward, with huge wall like hills of limestone on each of the three irregular sides. It now arrives at the Tsin-doung-ke-takahu (foot of the elephant hill camping ground) the great axis of the range and here is the source of the Lung-long or Shita river. It takes its rise in this hill where valley and is conformed by an under ground passage through the hill just crossed elevation 2,800 feet. The Tsin-doung range forms the boundary between Burma proper and the Shan States.</p>
6 Tsin-doung kite (or tate) Teakahn	5	42		<p>This march leads up the big hill in a steep zig-zag fashion; the ground is very rocky massed and pebbles of limestone well rounded and water worn in hollows and cavities. The road crosses over the lower and more level part of Tsin-doung range and then continues on east by a spur or ridge a short way to the Tsin-doung kite or tate Teakahn (baiting place upon the plateau hill). The plateau where the camping ground is 2,800 feet at sea level 2 miles from camp; the village of Tsin-doung outside the village a small plot of Burmese soldiers.</p>
7 Tsin-doung	7	49		<p>Road bears at first to the south-east and then east winds round the big hill called Jhabia-doung observed from the summit of the highest peak of Tsin-doung; it appears to be almost if not quite as high as the latter. From this hill a better view is obtained of the great expanse of the high lands of the Shan States a panorama of undulating and open dunes, with hill and dale in repeated succession the higher ranges forming the great watersheds between the main valleys these appear to run very regularly north and south, on a clear day the great Neung-yay lake is said to be partially visible from this hill about 20 or 30 miles in a south-east direction. Leaving the hill the road makes a continuous and winding descent for 1,000 feet over broken stony ground on to more gentle slopes and open undulating downs, covered with short grass and bushy fir trees and then more gradually in a N. E. direction till it reaches the camping ground in the valley near a village called Tsin-doung. On the road, Mlay-yay, the residence of the Governor of the Shan States, is visible. It is not more than 15 miles distant in a direct line to the south-east. There are several small villages scattered through this valley and there is evidence of more industry and agriculture than is generally seen in Burma. The small stream in the valley falls into the Neung-yay-yay. On the east the valley is enclosed by a steep scarp.</p>

ROUTE No 46—cont'd

From Yemay-then to Thien-nee—cont'd

Names of Stages	DISTANCE.		Rivers	Remarks
	Inter- med. or	Total.		
	Miles.	Miles.		
8. Oung Ban	10	59	Toung hla timber bridge	Direction N \ F Proceeding down the valley for about 24 miles the road turns up the east side at Cha-ben-yue, and continues on the irregular ground toward the foot of a very prominent hill with high rocky bluffs called Min-na-tet-ung, skirting along on the eastern side reach the village of the same name then passing over cultivated land and open down again meet the Toung hla stream now running from the N W It is crossed by a good timber bridge The road now passes over a broad stretch of fertile level country The drainage of two tributary valleys (the one from the north at Pa-yha, and the other from the north west, here meet and join the Toung hla stream There are many large villages hereabout, and the lands appear remarkably strikingly of the down of England The greater portion of the land is under cultivation no trees to be seen except in the enclosure of the different villages Firewood at 3 annas per cooly load
9 Tingray gyat	7	66		Direction N \ F Road most excellent the whole distance as the hill grows very numerous Tingray gyat is a large village of Fung-yue and Toung thooe
10 Kyonk tat	8	74		Direction as before The high road from Tingray-gyat goes through an avenue of trees, and is a good road for the distance Though a view of an extensive valley to the eastward apparently all under cultivation between this valley and the Kyonng Young only a few ranges of hills There is a good deal of traffic between Mone and Bidia and Tonghoo and Inlay Kyonk tat is a large town or rather overgrown village and is the nearest village to the State Here there are a few works of Indian origin to all roads Since the hill growth is dense and jungle met in consequence of the great scarcity of wood the houses are built on high ground houses very few are raised from the ground and the walls are mostly mud walls Elephant forage must be purchased Camp in large cluster of sayats close to the Bazaar and near a fine tank of water
11 Tethone	9	83		Along a very level road Camp in paddy fields near a fine well to which people for more than a mile around come for water General direction N 20° west till approaching within a mile east of the town of Fway hla then turn nearly due north and see the town of Poudayah about two miles to the west Country very thickly populated
12 Sep-pan gyin	14	97		Direct by north The direct bearing for Minkein Myow is due N E The road keeps up the high land that forms the watershed between the Nunggyay lake and the Myit Ngay The country becomes more wooded and the soil more rocky only two villages in sight during march Little cultivation about, the hills covered with jungle Half to Phoongyee house, at the deserted village of Sep-pan-gyin.

ROUTE No 46—contd

From Yemay-then to Thien see—contd

Names of Stages	DISTANCE		Rivers.	Remarks
	<i>I term-</i>	Total		
	Miles	Miles.		
13 Mine Byin Myo.	18	116	Natee Khyoung (strong timber bridge)	At first the road makes a general descent over waste land covered with jungle, then continuing on in an easterly direction it passes through the low country and on to the plain of the great Min-lyin valley. During the last 4 miles gravelly - succeeded to the Nyoung-gay valley. When within a mile of the town cross the Naton Khyoung by a substantial timber bridge; this rivulet is the largest yet met with in the Shan country for hitherto on this route there has been a scarcity of water and must be very much so at the end of the dry season. The Nat-el said to take its rise in a large swampy lake up the alley to the south, thence a considerable body of clear water flows between steep bank and lower rocky bed with many noisy falls and rapids. There are also several fine tanks of water in the neighbourhood of the town which is situated in the low country bordering the east side of the Min-lyin plain. From Mine-byin the most direct road to Thabeikgyi would be to continue down the valley northward to Yauk-song thence to Thong-wa and on to Thabunnee. Good feeding for elephants.
14 Pinteaw	7	122		At the foot of a small range of hills. General direction Northward at turning crosses the east side of the plain then passes over a few small hills covered with thick trees, partly bare of foliage until down to camp ground on a small mountain stream close to the village of Pinteaw.
15 Nattit	7	129		Road not so good. Crosses a high watershed and descends among a number of little valleys as streams that run into the valley from the N. up to the large stream flow down towards Mong Pan-tai (Mawlaikya) in the Mawlaikya river. The rocky range of hills rises less than 1000 feet above the Min-lyin valley. It forms the boundary between the area of the Min-lyin and the Nyoung-gay valleys down to the east. All these little valleys down to the east are laid out in miniature parallel ridges separated by narrow valleys. The hills are covered with forest grass and some few tall trees on the high hill now left with forest in the extreme. There are mountains with the largest of the Pan-shan and Nattit. Altitude about 3500 feet or 600 above Min-lyin valley. The hills have to be crossed going from Nattit to Panteaw via up road, up a range to a height of some 6000 feet 2500 above the Min-lyin valley. One set at 12000 feet above the valley floor on the other the figures show the difference of levels between the two valleys. The ranges strike at right angles to the north and extend to the south the main ridge extending to the great watershed between the Min-lyin and the Mawlaikya valleys in an unbroken line for some 70 or 80 miles where in latitude 23° 30' it is interrupted by a valley. From Nattit there are two roads to Layda: the one to the north called the Mon-nam (Modwinan) ascends the side of the hills with the edge of the great watershed still arising at the base of the forest in the Nyoung-gay valley. The other goes to the west bank of the Nyoung-gay valley, then without crossing the road bends round northward and turning to the east passes over three smaller ridges into the Layda valley. The direct road hears P.N.F. from Nattit, passing over a series of hills by more easy gradients, though much intercepted by streams that render it impassable during the rainy season.

ROUTE No 46—*contd*
From Yemay-lhen to Thien-nee—contd

Names of Stages	DISTANCE.		Rivers.	Remarks.
	Inter- mediate	Total.		
	Miles.	Miles.		
16 Michinoo	5	134		After proceeding about 1 mile sight a large stream running south. This is said to be the Poon Choung that joins the Salween a short distance above the Kaimayphoo in Kawnnee. Following the right bank of the stream for about 2 miles, and then ascend a very steep hill. After descending about 2 miles reach a halting place called Michinoo. We are here surrounded by high hills on all sides. The water is very scarce and obtained from a small spring about a quarter of a mile distant.
17 Kantour	10	144		The road for the first two miles gradually ascends. From the highest point of the range the next halting place on the valley below does not appear more than 5 miles distant. The road however was very well laid out, avoiding all great declivities. The sides of the hills, along which the road wound are for the most part steeply sloping. Before reaching the valley the march is lengthened out to nearly 8 miles. Camp on the Poon Choung near the village of Kantour.
18 Laydee	12	156		The road leads up the Kantour valley for a distance of 5 miles in an easterly direction. Then crosses a low range of hills and descends to the Laydee Valley. From the number of villages passed the surrounding country appears to be densely populated. The town of Laydee is situated towards the middle of an enormous plain that runs nearly north and south. Like many other of the large towns of the Shan States, it was formerly of much greater importance owing to local disturbances that arose amongst the Native Chicks, and other causes. This once flourishing town now barely comprises 200 houses. The high street or main road through the town is very broad and nearly half a mile long. It runs east and west with cross roads at either end. The houses are small and low as all Shan houses generally are with little gardens and irregular enclosures around them. The town itself is enclosed by an embankment on the north side and a moat on the south. A stream runs along the west side and a large tank bounding the east. No houses are seen from the outside, the town being completely shut in with thick clusters of bamboo.
19 Mine-khan	8	164		The road follows along the western side of the plain; at 8 miles passes the large Bazar of Hon Pon in the vicinity of which there are said to be several villages.
20 Kin yua	8	172		Direction N N W. A road rather difficult for elephants crosses western range of hills. At 6 miles it reaches the highest point where a boundary pillar marks the division between the Laydee and Mine-Kine districts. Two miles further on reached a small village called Kin yua where there is a small outpost from the chief town. Encamped in some paddy fields below the village. The elevated parts are clad with long grass, fern leaves, and in parts woods of fir and other trees.

Route No 46—contd

From Yemay-then to Thien-mee—contd

Names of Stages.	DISTANCE		Rivers.	Remarks.
	Inter mediate	Total		
	Miles	Miles		
21 Mine-kine	10	182		By a good road. Crosses several small valleys separated from the large Mine-kine one by small hills. marched up the chief valley for 3 miles and encamp 1 mile to the north of the town of Minekine in a large Layat. The town contains about 100 houses. A large manufacture of pottery is carried on here. Provisions of all sorts are plentiful. On the hills bounding the valley live a wild tribe called Paloungs.
22 Bant louk	7	189		In northerly direction up the valley for 3 miles passing several large villages, crosses a few small hills and encamp in a small valley on the Thien-choung near the village of Bant-louk.
23 Mahmong	0	108		For the first three miles the road follows along the left bank of the Thien-houng and for the remainder of the distance wound round several small hills on the slopes of which were several toungyas ready for burning. Camp in a clearing of bamboo near a tank at the village of Mahmong.
24 Kyai houng	10	208		Road very level the whole way. At 8 miles reached the boundary between the Maung-kaiing and Bannam districts.
25 Ban zam	6	214		The road passes in an easterly direction through a very beautiful valley. Camp near a large stream on the south side of the town of Ban-zam. The town itself consists of not more than 50 houses, but the bazaar outside is very large and the adjacent villages numerous. There are numerous temples in the vicinity. By the direct road Bannam is only one day's journey.
26 Hentone	8	222		Direction E 15 N. The road is well beaten and there is apparently much traffic thereon. The road passes through a very low hilly than hitherto over bushy low, grassy slopes and gentle undulations encamp on a small stream by a large bazaar near the village of Hentone. Near here there are a race of people called Yinnaks. They are in appearance like Tung-loos. The peculiarity in the women's dress consists of broad bands of wire fastened tightly round their waists over their clothes. The race is said to be very numerous; there are three tribes of them speaking different languages—Kis yinnaks, Yinnaks and Yin bans.
27 Keain loon	8	230		Direction E 20 N. to within one mile of the village of Keain loon passing over low ground and a general common.
28 Banwoot	5	235	Nalloung khyoung rather deep ford	North of Keain loon there is a hill but of no great height, over which the road passes on to open country again and descending gradually shortly comes to the small town of Banwoot, crosses the Nalloung-khyoung 80 feet broad; ford rather deep.
29 Mine-tha	5	240		The road ascends over downs and commons similar to those previously mentioned and after 5 miles more reaches Mine-tha, where there are some good Zayats in the enclosure of a Phoungye house.

ROUTE No 46—concl'd

From Yemay-then to Thien-nee—concl'd

Names of Stages	DISTANCE.		Rivers.	Remarks.
	<i>Ter- med at</i>	<i>Total</i>		
	Miles.	Miles		
30 Camp	12	252		First 7 miles of road over country similar to that between Banwoot and Mah-she thus descends on to a lower and more level broad of Champaigne country through which the Nam-a-la Khyung flows from north west to south east. Cave in jungle near a small stream.
31 Ootoo	11	263		At 8 miles reach the high road leading to Thoe-ban while it is said to be distant 100 miles. It re-leaves the high road and passes to west of village of Hanzin passing the valley Nam-a-la Khyung. East of Ootoo is a big hill called Simao.
32 Camp	70	702		Direction N by E to Min-tak thence north-north-east down into a large plain and pass several large villages. At about 4 miles pass Malung-tak situated in a small valley from the north (1 more than a mile across an hour) and then descend by low hills sloping towards the valley. Beyond the westward many long ranges are visible and Thoe-ban is said to lie to the W.S.W. distant 20 or 30 miles. After passing Min-tak the road ascends over rather ground beyond the valley and after about three miles arrives at the brow of a range near this in the Nah-we-ki-yung. Beyond the brow there is a considerable precipitation and a precipice there may be seen in front great wooded valleys (country of a mu lower than the precipice) and beyond again high range of hills and mountains and a shuttling out all view of the country further to the north.
33 Hioote	13	293		Follow down the steep descent on to more level ground and pass the villages of Nang-nan and Pasheng. Very difficult road for the horses. At the last the road crosses a very difficult bridge over a wide high waterfall. In the part of the march over the mountain, country very red with jungle. Halt at village of Hioote. There is a great valley to the left to westward.
34 Toung-tate	9	292		At 3 miles road crosses a large stream that falls into the Mink-mal. Mill further passes the large village. Bar situated on the banks of the Nam-jong. This stream runs very swiftly over a pebbly bed between high banks the first part. After this gradually ascend to nearly five miles till it reaches the village of Toung-tate at the top of the range that bounds the south of the La-sheoo Valley. In the village itself there was a small earthwork and at the narrow passes of the hills ascending this range there were similar defences.
35 La-sheoo	10	302		From Bausé La-sheoo is only 14 miles on the map, but requires two very marches to mount cross and descend the mass of hills intervening. The range covered with dense jungle lofty forest trees and rank underwood especially on the south side rises to about 1400 feet above the level of Bausé. It runs for a long way onward then to north-east but in the westward it appears to break up into irregular hills beyond which are distant ridges running longitudinally. La-sheoo was destroyed with the exception of the two-headed residence of the Governor in 1864. It is situated in the broad valley of the Mammayow stream beyond which is another big range of hills running east and west.
36 Thien-nee	20	322		The road to Thien-nee lies across the last-named big range of hills beyond the Mammayow stream. The town was entirely destroyed in 1864.

Route No 47

From—YEMAY-THEN

To—AVA

Territory —BURMA

Authority —Native

Names of Stages.	DISTANCE.		Rivers	Remarks
	Inter- mediate	Total		
	Miles.	Miles		
				Started from Nyingyan we passed the stream called Nga like Choung about 200 feet wide and 8 feet depth; no bridge no boats very strong current. It issues from the Yoma hill and joins the Pan young river down which large quantities of teak timber are floated. We follow a fairly good road passing through fields and reach Rain b n-mau distance about 2 miles. There are some savats here. The next stage is Thit cha-kone; road tolerably good.
Thit-cha kone	6			Village. Water-supply good there are 15 houses; population is about 30 and bullocks 20 carts few road tolerably good to Shway myo.
Shway myo	10	16		A large village there are about 100 houses supplies and water plentiful from the stream called Ndin thau Choung the population is about 200 and bullocks 150. Cultivation paddy sesamum and Indian-corn rice very good. The next stage is Nyoung kine road bad, muddy in rainy season.
Nyoung kine	8	24		Small village water-supply good there are about 15 or 20 houses population 30 bullocks 30 carts 10. Next stage is Pin thung road bad passed through jungle of dense bamboo trees.
Pin thung	8	32		Small village water-supply good there are about 10 houses population 30 bullocks 30 cultivation paddy. The next stage is Htont kyan kone road bad.
Htont-kyan kone	8	40		A village water good supplies procurable there are about 20 houses bullocks 150 cultivation paddy, the population was about 50; next stage is Ya may then; road bad passing through hills.
Ya may then	8	48		A large town there are 500 houses supplies good and water good and plentiful from the tank called Kyee-nekkan close to the town. A ruined brick wall surrounds the town. The mud was dry except the north part which was crossed by a wooden bridge over it; the population was about 1500 and there were a great number of buildings, 100 houses, 500 young and pagodas. There was also a plentiful supply of goats and ponies were procurable. Hills round with east and west of the town. A road passed from east to the foot of the hills; it is about 100 English miles straight to Ava. The next stage is Pyaw bway road good.
Pyaw bway	14	62		A large village there are 300 houses 200 bullocks, and the population is 500. There are supplies of carts and ponies; water good, from the wells. Daily bazaar; it is very hot in the dry season. No water in the stream. The hills appear to the east at this place there is a pagoda on the top of the hill called Shway-mayin-din Panwa, where there is an annual feast. The next stage is Shan ywa road good.
Shan ywa	6½	68½		Water-supply good. This is a village of 15 houses bullocks 40 population 20 cultivation paddy and sesamum. The next stage is Nyoung-yan road good.

ROUTE No 47—contd

From Yemay-then to Ava—contd

Names of Stages	DISTANCE		Rivers	Remarks.
	Inter-mediate	Total		
	Miles.	Miles.		
Nyoung yan	8	70½		A large town; there are 300 houses and sayats bazaar every five day outside of the town bullocks 400 goats 150 water-supply good from the wells road from this town passed several villages. The next stage is Magyee-sin road good
Magyee-sin	12	88½		Village, water-supply scarce land dry in 1881 there being very little rain there are 15 houses; population 30; bullocks 100 we saw along side of the road paddy and sesamum all dry in the fields The next stage is Han-sa road good
Han sa				Village There are about 15 houses water-supply scarce land dry; bullocks 50 Zayats in this place The next stage is Phaya phyoo road good.
Phaya-phyoo	12½			Water supply scarce no good Zayats; one or two pagodas; there are 40 houses, bullocks 150 cultivation paddy sesamum and in bean-corn last year very little rain. The next stage is Yit-kan road good
Yit-kan	10½			Village; water-supply plentiful from the lake; there are about 10 houses The village east of the road The next stage is Toung-dwin ngay road good
Toung-dwin ngay	6			Village water-supply good, there are 20 houses toddy trees plentiful there are also Zayats. The next stage is Sagaung road good
Sagaung	10			Village water-supply scarce there are about 15 houses. The next stage is Tada-oo good roads
Tada-oo	4½			A large village there are about 100 houses and pagodas; bazaar daily water-supply good The next stage is Ava road good about 8 miles

CHAPTER IV

CLIMATE

The climate of Burma differs considerably in the higher and lower districts, but is everywhere salubrious to natives and not inimical to the European constitution. The low jungles are for the most part malarious, and in some places, as for instance the country between the Chin dwm and Manipur, said to be deadly to Europeans.

Except in the mountain regions to the north-east, there may be said to be three seasons,—the cool, the hot, and the rainy. The cool season begins about the same time as in British Burma, and continues till the end of February, making about four months. The thermometer now descends to about 40° at the lowest. This temperature is, however, only just before morning, in the middle of the day it is seldom colder than 60°.

The great heat averages in the hottest weather from 80° to 90° but sometimes rises much higher. In the most elevated districts a comparatively cold winter is encountered, and in the mountains and high tablelands stretching between the north eastern frontier and China snow falls during the winter months, though it does not lie long. Frost during the night is also of frequent occurrence.

A little above our frontier post of Munday the south west monsoon is only marked by occasional showers. The climate is consequently much drier, and at Mandalay and further north the change is still more marked. Drought is sometimes experienced in these parts, but famines proceeding from such are unknown.

Symes, speaking of the climate of Burma proper, contrasts what Malcolm says regarding its salubrity, and adds that the seasons are regular, and extremes of heat and cold rare. The rainfall at Mandalay is only 40 inches, at Bhamo, however, it varies from 45 to 60 inches. "South of Mandalay in the region of which the old city of Pagan is the centre the air is of a marvellous dryness. The contrast observable on going northwards from the delta to Upper Burma is here intensified. It is said occasional showers of rain fall, but this happens seldom, and it is estimated that the rainfall of a large portion of the country is here less than 10 inches yearly. The region to the north and east of Mandalay is believed to be better watered, but the rainfall cannot be heavy, as the Myit ngay, which drains almost the whole of this country and a portion to the south, in all some 14,000 square miles, is only about 120 yards broad near its mouth."*

The climate of the valleys of the Chin dwm and Moo rivers, between lat 22° and 27°, is described as very dry, and the rainfall must apparently be less than that of Manipur, the average of which is less than 50 inches yearly †.

Mr Gordon in his *Report on the Irrawaddy River* considers it probable that the Burmese valley, taken as a whole, has a smaller rainfall than 40 inches.

The climate of all the country between the Irrawaddy and the Shan mountains and between the twentieth and twenty-second degrees of latitude is excessively dry. Along the direct route from Yumay than to Ava the ground is so parched that elephants cannot be taken along it in the hot weather but go by the Shan hills and Nattik pass.

Upper Burma may be divided into two zones,—the dry, and the damp. The former commences at about Magway, and extends up to and beyond Mandalay, and inland from the river to the Shan hills. This zone is indicated

* *Report on Irrawaddy*, by Gordon. | † Gordon vol I c 8, 1879; vol I, c 7

on the hyetographical map by barbed arrows, the wet zone by blunt arrows. The dry portion is principally high open land, the damp zone being generally lower and more wooded.

In January 1882 the average temperature was $57\frac{1}{2}^{\circ}$ minimum and $74\frac{1}{2}^{\circ}$

Temperature at Manda- maximum in the shade
lay

There were four or five days' heavy rain in November between Myin gyan and Mandalay. This was enough to make the roads in many places almost impassable from mud.

During the month of December and part of January there were heavy dense fogs, which sometimes did not lift until 11 and 12 o'clock. The afternoons and nights were fine and bright.

CHAPTER V

TRADE, MANUFACTURES AND AGRICULTURE

For many centuries Burma had a flourishing trade with China by the route leaving the Irrawaddy at Bhamo. Both the Dutch and English opened factories at Bhamo in the beginning of the seventeenth century, where they were established by permission, but had no treaty rights. After some years both nations were expelled. According to Colonel Yule, the value of the trade was—

		Rs.
Exports	{ Cotton	22,50,000
	{ Miscellaneous	1,00,000
		<hr/> 23,50,000
Imports	{ Silk	12,00,000
	{ Miscellaneous	6,75,000
		<hr/> 18,75,000
Gross value		<hr/> 42,25,000

This trade, which was principally in the hands of the Chinese, was not carried on all the year round, but at annual fairs,—caravans arriving at Ava from China in December. The principal fair was at Bhamo.

After the annexation of Pegu Burma was entirely cut off from the seaboard, and became dependent on caravans from China and the Shan states and importations through British territory. The Burmans, however, still adhere to the same policy that was in force when Father San Germano wrote about them, and put every possible hindrance in the way of merchants, and levy high import, export, and transit duties. In 1862 a commercial treaty was made with the King of Burma providing for an optional abolition of customs dues on both sides, but although the British Government ceased to collect frontier dues, the Burmese Government made no alteration. In 1867 another treaty was made, and the Burmans reduced the duty on imports from 10 to 5 per cent.

The trade of Upper Burma with the British provinces, which has been increasing for many years, has considerably fallen off since the death of king Mung Lon and the massacres committed by the reigning king. In June 1879 the Mandalay market having become exhausted, and the local panic having passed away, business revived. When the British Resident was withdrawn from the Court, trade was again affected.

The total exports from Upper Burma amounted in the year 1878-79 to £2,077,540, of which £1,607,706 came by the Irrawaddy route, and £313,208 by the Sittang, and £156,626 was contributed by the land trade. The total increase on the previous year is £374,108 —

The principal trade routes are as under —

River routes

Irrawaddy *via* Allammyo

Sittang *via* Toungoo

Land routes

Kyauk pyoo district <i>via</i> Aeng Pass	Salween
Thayetmyo	Toungoo

The principal items are—

	£
Raw cotton	82 080
Sesamum oil	118 271
Silk piece-goods	159 599
Timber	219 914
Cutch	47 499
Petroleum	36 632
Jagvery	128 608
Stick lac	2,224
Pickled tea	54 007
Fruits and nuts	5,003
Hides	24 273
Indic stone	10,251
Wheat	
Tobacco	10 705
Pomeo	10 629
Cattle	159 081

There is also a trade in metal and cotton goods, raw cotton, earthen and lacquered ware, copper, precious stones, &c

At the beginning of the year 1879 the late king held monopolies of jagvery, tobacco, gram and pulse, pickled tea, and petroleum. These arrangements came to an end in October, and consequently an increase of trade took place in these articles. The imports during the same period amounted to about £1,938,720, and included the following principal items —

Rice and paddy	Piece-goods (cotton silk and wool)
Cotton twist and yarn	Raw silk
Salt (Europe)	Ngapee
Betel nut	Crockery
Wines and spirits	Metals (exclusive of machinery)

Sugar

Regarding trade with Upper Burma and the Shan states, Dr Clement Williams remarks "The commercial condition of Burma proper requires notice, not only from the extent to which it takes our manufactures in exchange for its own products, but also on account of its great, but little known, mineral wealth. Nearly all the products which are exported to British Burma are grown below the capital. They might be increased indefinitely by a more numerous population,

sure of more protection and freedom to dispose of property than unhappily at present obtains. Large tracts of land to the south, and of still greater extent to the north of the capital, formerly producing cotton for the China market, are now abandoned and left uncultivated.

"As to the mineral resources, there are three or four distinct places where coal crops out from which good samples have been procured, and that promise to be the sites of extensive beds. These spots are not distant from the river. Copper is found, but it is doubtful if the ore is worth working.

"Iron of good quality is made from hematite found near Puppa Dongg north-east of Pagan, and also near the Arakan mountains beyond Yau. Large deposits of the richest magnetic oxide exist in the ridges directly east of the capital, surrounded by limestone which may serve as flux, and forests (not improbably also coal) which may afford fuel. From this ore steel of a first rate quality may be produced, although it is not made use of by the Burmans. It exists in abundance within a stone's throw of the banks of the navigable Myitngay river.

"Lead, silver, gold, and precious stones are also mineral products of Burma proper, and are well known to be at present comparatively undeveloped sources of wealth. To these may be added bismuth, sulphur, marl, turpentine, amber, salt, and limestone. The iron and coal are, however, of more particular importance.

"The population of Burma is about 4,000,000. Already a great portion of this population is clothed with English manufactures, imported from British Burma. It only requires better communication and a lower import tariff to increase the number of customers to the whole population.

"The people of the Burman Shan states are also consumers of British manufactures. The Shan states are believed to be rich in mineral products, and the lead and silver of Burma are almost entirely the produce of mines in these Shan territories.

"In the northern portion of Burma proper are held annual fairs at several points on the Irrawaddy, where not only the Shans, Pwos, and Kadoos of the interior, but the Kachins of the mountains, come to buy the very inferior goods that native merchants take up to those markets. These fairs take place in the cold season. The largest are held in connection with religious festivals at Thayain, Shwaygoo, and Sasecna. The trade is very unsatisfactorily conducted. The sales of each trade are small, but the profits large, and the articles are very inferior and very dear. None are exported to China, the Chinese producing better, at a less price. Another important article of trade in that direction is salt. It is exported from Bhamo in every direction, all the tribes, wild and peaceable, being dependent on Burmese salt and great quantities find their way into Yunnan.

In the Kachin hills are two most important minerals,—lead and silver. A specimen of galena taken from the spot where it occurs in abundance, but which has not been worked as a mine, contained 68 ounces to the ton of lead—a very rich ore. Mercury is also said to be obtainable within a few miles of the western slopes, near the Burmese village of Tulo.

The eight Shan states between Yunnan and the Kachin mountains are known to be thickly populated, and labour is there abundant, and exceedingly cheap. At their southern end in Burmese territory, near Kang-ma, is an extensive silver mine, known for ages, but recently abandoned.

Much has been written regarding the commercial prospects of the British Burma merchant in the Chinese province of Yunnan, and it was proposed

to open a trade route *via* Bhamo, the Kachin hills, Momien, and Tah-foo To an unprejudiced reader of the various reports on this route, it does not appear that it is practicable as a trade route, and the British merchant would do well to reflect on what Mr Baber in his *Report of a Journey through the Province of Yunnan* remarks with regard to it He thus writes "It seems hopeless to think of making it practicable for wheeled carriage The valleys, or rather abysses, of the Salween and Mekong must long remain insuperable difficulties, not to speak of other obstacles It seems to have been assumed by the members of Colonel Sladen's Mission that when T'eng yueh (Momien) is reached, the obstacles to a highway into Yunnan have been surmounted The fact is that the difficulties begin at T'eng yueh T'eng yueh draws whatever prosperity it possesses from the Ta-peng valley The trader is still separated by many steep miles from Yung-ch'ang, and when he arrives at that city he will fail to find a market He must struggle on to Tali, in the quarterly fair he may meet with a certain demand for pedlery, but for little else It is not to be supposed that, however energetic the British merchant is he will attempt the wild route of Yunnan-foo, but in the event of his attaining that capital, he will suddenly be aware that foreign manufactures can be conveyed with ease and rapidity from Canton, and his intelligence will at last open to the fact that Yunnan-foo is only 400 miles distant from the sea

"The simple and evident approach to Eastern Yunnan is from the gulf of Tonquin, and to reach the western part of that province, the object should be to attain some town of importance south of Yung ch'ang and Tali foo, such as Shun-ning, from which both those cities could be reached by ascending the valleys, instead of crossing all the mountain ranges, as must be done if the T'eng yueh route is selected"* This would be reached by the old route *via* Thien-nee, which has been for centuries the highway between China and Burma.

The former trade between Yunnan and Burma consisted almost solely of an exchange of the silk, copper, gold, orpiment, quicksilver, hams, honey, drugs, carpets, and paper of Western China, for the raw cotton, ivory, amber, jade stone, peacock's feathers, bird's nests, &c, of Burma Little tea was brought over beyond what the Chinese in Burma consumed, and scarcely any of the foreign articles exported into Burma were taken to China †

None of the manufactures in Burma are of any great importance, or

Manufactures afford employment to large numbers of people

Weaving is carried on in almost every house, particularly in the country

Weaving The machine is exceedingly simple and is roughly made

The articles made are of cotton or silk, and consist principally of waist clothes, 15 feet long and 3 feet 4 inches wide, of different colours, for men

Hta-mien worn by women, silk pieces for making jackets, coverlets of cotton, and thick sheets Formerly the cotton goods were made from home-grown cotton, but now English yarn is extensively used

Lac is cultivated in Upper Burma and the Shan states, and considerable quantities of cutch are manufactured

Bells and gongs are largely made in Burma They are to be had of all sizes

The ironwork among the Burmans is fair The Northern Shans, however, manufacture excellent dahs, and are first rate workmen, who can smelt their own iron and make their own steel ‡ A combination of carved and gilt work, with geometrical patterns inlaid in mirror, is a favourite style of art among the Burmans

* Mr Baber's Report page 59 | † Dr Williams | ‡ Forbes, page 126.

Many of the carpenters are good carvers Their principal employment is working for the adornment of monasteries.

Lacquered ware is manufactured in the town of Nyounng-oo Captain Yule gives an interesting description of the process in his *Mission to Ava*, page 197

Lacquer

The Burmans are most expert boat-builders The lines of all the boats from the smallest canoe up to vessels of eight tons burden and sixty or more feet length, are the same

Boat-building

The lines of all Burmese boats are beautifully fine and graceful, but of course the absence of any keel gives them no hold in the water, and they can only sail with the wind They carry a single square sail generally, but the largest boats carry an enormous spread of canvas for the size of the vessel *

The gold and silver smiths are not equal in point of finish to Indian workmen, but the style is highly effective and characteristic Their best designs are large silver bowls,

Silversmiths.

embossed in high relief with the signs of the zodiac and other fanciful figures

Pottery is manufactured wherever a suitable earth is found Every variety of utensil, from twelve-bushel glazed jars to little plain earthen saucers, are made

Pottery

The Burmans manufacture a peculiar thick paper from a certain kind of bark, which having been thickly coated with a charcoal paste, is folded like a fan, and written upon with a statite pencil

The soil is very rich, especially in the alluvial plains both of Upper and Lower Burma, but the Burman is so lazy that he only cultivates sufficient land to sustain himself and

Agriculture.

family There is consequently much fertile land uncultivated The manner of tilling the land is very primitive and ineffective Captain Yule mentions the scornful remark of a Hindustani zamindar who accompanied the Mission "Truly," said he, "it is by the beneficence of the Almighty only that these people get their food, and by no skill or exertion of their own"†

The implement used in preparing dry cultivation is a single barred harrow or rake, with three huge wooden teeth A high bow of wood rises from the cross-bar, and enables the ploughman by pressing on the latter to guide the triple furrow

The plough used in rice land is more like that of India

The staple cereal is rice Wheat is also grown abundantly The other principal products are cotton, sesamum (oilseeds),

Products.

sugar, tobacco, and indigo Opium is also cultivated in the north eastern Shan states, as also a very superior quality of tobacco ‡

Upper Burma is in a great measure dependent on British Burma for her rice supply

CHAPTER VI

GOVERNMENT AND INTERNAL ADMINISTRATION

THE administration of Burma is absolute despotism The king is under no restraint whatever, saving his voluntary respect for Buddhist rules and precepts, otherwise he is lord and master of the life and property of every one

* Forbes' *Burma*, page 116 | † *Mission to Ava*, page 8. | ‡ *Expedition to Yunnan*, page 88.

of his subjects. There is no hereditary rank or title in the kingdom, excepting in the royal family. The king is the *font et origo* of all honour. The so-called nobles are only officials appointed or dismissed at his will, and it not unfrequently happens that a man may be in high favour with the king one day and in a horrible Burmese dungeon on the next. Any subject, not a slave or an outcast, may aspire to the highest offices in the State. Thus the country and the people are entirely at the disposal of the king, and the only check on mal administration is the fear of insurrection.

But though the king is an absolute despot, there are popular forms of government, which at some remote period may have exercised a wholesome check upon the sovereign's authority, although they have long since become wholly subservient to his will. He has no vizier, or prime minister, in the ordinary sense of the word. He has two councils,—a public and a privy one. The public council is known as the *Hlwot-daw*. Its officers are four in number, and are known as *woon gyees*. Their functions are legislative, executive, and judicial, but they sometimes act in their individual capacity. They exercise supreme power under the king in their collective capacity. The king used at one time to take his seat as president of the council, sometimes the crown prince sat as his representative. The *Hlwot-daw* is the final court of appeal. Every royal edict or proclamation is issued by the *Hlwot-daw*. Each *woon gyee* has an assistant known as a *woon douk*, who sits in the *Hlwot-daw*, but does not speak or vote.

The privy council is known as the *Bya-dok*. It is held in a chamber within the palace. Its members are called *atween-woons* and are four in number, and sometimes six. They relieve each other in close attendance on the king, and are the immediate recipients of all orders from his majesty.

They are inferior in precedence to the *woon gyee*, but sometimes their influences over the king is much dreaded by the latter. The *atween-woons* have no seat in the *Hlwot-daw*, but the *woon gyees* may call for their presence, or even for that of the king himself, if they see cause.

These two councils appear as relics of a constitution which has long lost all real power. The members of both are mere nominees of the king. They are the creatures of his will,—the instruments by which his orders are carried out. Occasionally he may listen to their advice, but they exercise nothing of the influence which attends a hereditary or elective body, and their authority, excepting in matters of detail, is a mere sham.

The *woon gyees* rarely venture to press disagreeable advice upon the king, but when it is absolutely necessary they pledge themselves to stand by one another. One then commences the dangerous communication. If the king looks displeased, another takes up the discourse, and the third and fourth follow close after. Thus the king does not know whom to punish, though king *Pha gye* did sometimes solved the difficulty by sending all to the pillory.

The *woon gyees* are generally designated either by the title of some office which they have held, or by a sort of peerage title derived from the township or district which they "eat," or hold in jaghir. *Men-gyee*, or "great prince," seems to be their appropriate title of address. Their formal designation in Burmanised Pali is "*Egga Maha Thma-padi*," or "*Thmadi padi*," which is a corruption of the Sanskrit *eka*, chief, *maha*, great, *senapati*, general.

The *woon gyees* are also called *proeen*, or *outer thma-padi*, the household ministers, *alween*, or *inner thma-padi*. The *atween-woons* are often

called by their own proper names, which is not usually the case with the woon-gyees

Wherever the king may go, even for the most temporary sojourn, a Hlwot-daw is established in its proper relative position to the king's residence *

Orders from the king are brought to the Hlwot-daw by the than-daw-zens. When such a messenger enters the Hlwot-daw, all turn towards the throne, whilst the than-daw-zen kneels before it, and all perform the shikko. The than-daw-zen then sing-songs out his majesty's commands †

Besides the cases adjudged by the Hlwot-daw collectively, it has always been the custom for many suits to be referred to individual ministers at their own houses, and this used to be one of the chief sources of their revenue, as costs to the amount of 10 per cent on the litigated property belonged of right to the judge

The woon-douks form the third order of ministers, and may be termed the assistants of the woon-gyees, with whom they sit in the Hlwot-daw, though in an inferior position. "It is a disputed point whether the rank of atween-woou or wou-douk be the higher" ‡

The provincial administration may be described as follows

The country is divided into provinces of very unequal size, these into districts, the districts into townships, the townships into villages or hamlets, of which the number in each is indefinite

The word *myo*, literally meaning a 'fortified town,' is applied both to a province and a township

The province is an aggregate of districts, and each particular one derives its name from the principal town within its boundary, being the residence of the governor. The township takes its name from the principal village within it

The governor of a province is called *myo woon*, and is vested with the entire charge, civil, judicial, military, and fiscal. All the public business of the province is transacted in an open hall, called a *yung-daw*

The district is governed by a *myo-thoo-gyee*. The town, village, or hamlet by a *ywa-thoo gyee*. These are all respectively subordinate to each other

No public officer under the Burmese government ever receives any fixed money salary. The principal are rewarded by assignments of the labour and industry of a given portion of the inhabitants, and the inferior ones by fees, perquisites, and irregular emoluments. Extortion and bribery are common to the whole class

The judicial and executive functions are so much blended in the Burmese form of administration, that the establishments peculiarly belonging to the former are not very numerous. At the capital there is a judicial officer of high rank called the *ta-ra-wa-thoo-gyee*. In former times the principal administration of justice, in the capital at least, appears to have been conducted by him, but he now seems to have been deprived of the greater part of it by the encroachments of the two executive councils

The palace has its own distinct governor called *wen-hmoo*, one to each gate. They are each supposed to have a thousand soldiers under them

In the provincial courts there is an officer called the *lit-kai*, a kind of sheriff, and, in imitation of the councils at the capital, an officer named

* Yule

†

† Burney

‡

‡ Crawford.

na-kan-daw, who discharges the office of a public informer. Most of the Burmese officers in the provinces down to the ywa-thoo gyee, or chief of a village, have assessors of their own nomination called kung, who take the drudgery off the hands of their chiefs, leaving the decisions to the latter. A myo, or town, is divided into wards, or ayats, each of which is under the direction of an inferior police officer, called the ayat-goung.

The most intelligent and active officers connected with the administration of justice are the she-nays, or pleaders. These persons are tolerably well acquainted with the laws and its forms, and occasionally useful and industrious. To each court and public officer are attached a competent number of na-lains, or messengers, and annexed to the principal courts is always to be found the tounge-hmoo, or executioner, with his band of branded ruffians.

The myo-thoo-gyees and ywa-thoo-gyees exercise a limited judicial authority within their respective jurisdictions, and are answerable for the conservation of the peace. Appeals in most instances lie from their authority to that of the provincial officers, but in criminal cases it is limited to inflicting a few strokes of a rattan, and they can neither imprison nor fetter.

The authority of the chief of a district is of course greater than that of the township or village, and it rests with him to leave and decide cases where the parties belong to different towns or villages. When the chief of towns or villages fail to produce the offender, they are made to answer the accusations themselves in their own persons at the provincial courts.

Burmese prisons are miserable places in point of accommodation, and as insecure as they are inconvenient. Their insecurity gives rise to the necessity of every prisoner being put into the stocks.

Witnesses are examined on oath, in extraordinary cases only. In important cases torture is applied both to principals and witnesses, and the gaolers have frequent recourse to a modification of it for the purpose of extorting money from their prisoners.

Like other semi-barbarous people, the Burmans have occasional recourse to the trial by ordeal. The accuser and accused are commonly required in such a case to dip the point of the forefinger of the right hand into melted lead or tin. At the end of three days the finger is punctured with a needle, when innocence is determined by blood flowing from the wound, guilt by the flow of watery fluid. A good deal depends in such a case on the disposition of the operator.

The Burmese punishments are cruel and severe. The lowest in the scale is imprisonment and fetters, the number of the latter varying according to circumstances from one pair up to nine. Then follow confiscations, floggings, mutilations, perpetual slavery of the temples, and various forms of death, more or less cruel. Decapitation is the most common of these, and crucifying is the usual punishment for dacoits. Drowning, burying alive, and throwing to wild beasts used to be sometimes resorted to.

The law allows no individual responsibility, so that the punishment or execution of one often involves the members of a whole family, together with their relations and dependents. Money, however, will expiate any offence, except treason and sacrilege. The incorrigible, when no longer able to pay fines, are tattooed with a circle on the cheek, or the name of the offence on

their breast. Persons thus marked are deprived of civil rights and become dead in law

The written code, civil and penal, though severe, is on the whole wise and good, but is little better than a dead-letter. Rulers from the highest to the lowest decide causes according to their own judgment or, more frequently, according to their own interest

An odious system prevails of the office of constable, gaoler, and executioner being united in the same person, and he is generally a criminal pardoned on consideration of his performing these duties for life

He is called pa-kwet (or cheek circle), from a circle which is branded on each of his cheeks. The pa-kwets are looked upon as outcasts, and when they die are denied funeral rights

The Burmans commonly suffer death with the intrepidity or indifference of other Asiatic people

From the constitution of the Burmese courts the administration of justice must necessarily be both corrupt and vexatious. The judges take bribes from both sides, and the decree, unless in very palpable cases, will be in favour of him who pays highest. Both the judges and ministerial officers either subsist altogether or gain a principal part of their emoluments from litigation, and therefore do all in their power to promote it. No prudent person therefore enters into a lawsuit, and "putting a man into justice," as the phrase is, is equivalent to inflicting upon him a most serious calamity — (*Cranford*)

The thoo-gyees of towns and villages are held responsible for any robbery. Individual responsibility of thoo-gyees. committed within their jurisdictions, if they cannot secure the robbers or trace them to some other jurisdiction.

In this case he must not only make good the property taken, but pay the following charges on the amount — A charge of fifty in one hundred called kombo, one-half of which goes to the myo-woon and members of the provincial court, and one half to the king, a charge of ten in one hundred called ti-woon, one-half of which goes to the myo-woon and the other half to the queen's minister, a charge of twenty five in one hundred which goes to the writers of the provincial court, and one of twelve and a half in one hundred for the messengers of the court. Besides these, a sum of two ticals is paid to a person called the seng-deng, and another of half a tical to a person called the atha-bo

In the case of abusive and provoking language the following are the charges — Fifteen ticals as a fine paid to the person aggrieved, seven and a half as kombo, one and a half as ti-woon, two ticals each for the scribes and messengers, and two and a half for pickled tea.

In the case of assault where no blood is shed the offender pays to the aggrieved party thirty ticals as damages, fifteen in the name of Kombo, three for Ti-woon, two ticals each to the writers and messengers of the court, and two and a half for pickled tea.

In cases of adultery the offender pays to the husband and public officers exactly the same fine and fees as in the case of common assault when no blood has been shed.

Charges were made on the institution of any civil suit. When an appeal was made from one court to another, various charges had to be paid

The presentation of a petition to the myo-woon was accompanied by charges. There were separate and distinct charges on oaths. Everything connected with the administration of justice seems to be made a subject of

extortion. The gaolers had their established fees and profits, which were extorted from prisoners under penalty of starvation and bad usage.

Mr Crawford in concluding his remarks on the Burmese laws says "Although the Burmese government be arbitrary, and the administration, of justice expensive and vexatious, it is far from being efficient" The police is as bad as possible, and at the time of his writing the country was overrun with dacoits and robbers

As far as I could observe, the same remark applies to the Burman administration of the present day, except that the exceedingly severe laws put in practice in cases of robbery and dacoity have a most salutary deterring effect. And it is only in times of political convulsions that the turbulent spirits break loose, and forming bands of dacoits, ravage certain districts

As to bribes, the man who is prepared to pay another man's price is free to do much as he pleases in Burma

Formerly the head of every township paid a fixed sum yearly towards the imperial *revenue*. The money was either sent direct to the imperial treasury or paid over to some official or inmate of the palace or zenana to whom it might have been assigned. In those days the Burmese government paid no fixed salaries. Ministers, queens, &c., &c., were supported by the grant of a township or of some village or circle within a township, and known by the name of *myo-tsa*, or "eaters of the revenue"

The position of the head of a township was thus in direct antagonism to the interests of the people. He was responsible for the fixed yearly revenue, but as he received no salary, he was compelled to squeeze as much as he could out of the people for the support of himself and his followers.

The late king endeavoured to make a great change in this system. Many of the grants of revenues have been abolished, and the ministers and other officials and favourites are now paid fixed salaries

The people do not profit by the change. The financial system is still as oppressive as ever. The great principle of the Burmese *regime* is, that the subject is the property of the king, and that he is entitled to his labour gratis. There is little or no private property in land. Gardens and sites of houses, and sometimes tanks and fish ponds, are respected as private property, but lands in general are not regarded as property, or only as the property of the king. The lands are distributed in small allotments of only a few acres, and in this shape are assigned to the immediate cultivators,—but only as tenants raising produce for the good of the king. Under the despotic system of the Burmese Government, no large areas of land can possibly accumulate in the hands of independent proprietors

The petty proprietors owe their existence to their insignificance. The Burmese government claims the right of property in their labour, and collects such contributions as it pleases

Besides such regular contributions, the cultivators are subjected to occasional demands for extraordinary subsidies, which are ordered through the *Hlwot-daw*. Such demands are invariably made a pretext for additional exactions, which go into the pockets of local officials

"The cardinal tax over most parts of the country is a 'house tax,' or family tax. This seems to be assessed differently in different years, and then not by a fixed levy on each house. A sum is assessed on each circle of villages at an average rate per house, but the individual assessments are above or below this average, according to the supposed capabilities of the householder,

so that it acts as a sort of rude property tax *” Exceptions from this tax are granted on the ground of military service to some, and to others who are bound to give their services to the local authorities when required

Next in importance is the tax on agriculture In some districts this is not paid in money but kind, 5 per cent being levied

In other districts paddy tax is levied, sometimes amounting to 40 per cent, but generally only 12 or 15

Tobacco land is generally taxed in silver

Fisheries and salt are also taxed, and timber and forest produce are minor sources of revenue, licenses being issued to persons who had a monopoly of brokerage

“There is so little system,” says Captain Yule, “in the whole matter of Burmese revenue, that it is difficult to say what is ordinary and what is extraordinary War or other contingencies are met by a levy of unusual amount. These levies are greatly aggravated by the peculation which they give scope for among the officials” Petroleum, timber, and precious stones are royal monopolies

The king in 1855 received the following annual revenue —

	£
Profit on merchandise	227,500
Customs duties	44,200
	<hr/>
	271,700

As the troops and the greater portion of the boatmen are supported by the provinces, nearly the whole of the above amount may be regarded as available for the personal expenses of the king

The direct receipts into the royal treasury from the Shan principalities, which retain their *Taebwas*, are believed to be trifling, but a number of hungry Burmese officials fatten upon the Shans in those states which are most completely under subjection, and a considerable strip of Shan country along the eastern boundary of Burma proper, called the ‘*Myelat Ngay-goon*,’ or *middle land silver taxed*, is directly under the king

CHAPTER VII

THE ARMY AND NAVY

THE ARMY

SINCE the time when Captain Yule wrote about the Burmese army in 1855, it has been steadily retrograding, so that what he then said regarding it may be taken as a flattering description of what it is at present. No writer has since then gone into the subject so fully, and the references to Burmese military matters which are now met with are few and brief Captain Yule

* Yule, page 254.

says "The king of Ava has no magazines or munitions of war, properly so-called. He has a large number of heavy and field guns, nearly all of which would be pronounced unserviceable by us, and for these there is a small supply of indifferent ammunition. But he has neither trained gunners to fight his artillery nor equipage to transport them."

The royal arsenal is situated within the palace walls, and the powder and artillery material collected are stored here. The ordnance stored in the palace at that time consisted of about 270 brass guns of all sorts and sizes, 200 iron guns, and 40 mortars, with 560 jungals. Fifty-three of these were mounted on carriages, and nearly the whole of them were honeycombed and unserviceable. "Out of the whole arsenal it is doubtful whether the Burmans could bring into use more than thirty serviceable field-guns."

In addition to the guns at the capital, there are a few pieces at some provincial towns of importance, such as Toun-gwen-gyee, Monay, and Thien-nee. "Cannon has not that mysterious influence over the Burman that it possesses over the mind of the Golundaz of India. The country is unfavourable to its transport, had they even the requisite equipages, which they have not. And in estimating the military resources of the Burmans, both their cavalry and artillery may be safely left out of the calculation."

"Artillery to a Burmese army would prove rather an encumbrance than an auxiliary. The energy that might otherwise be employed against an enemy would be expended in attending to the safety of their guns. It is only behind a breastwork thrown up in a dense jungle, where he thinks he cannot be turned, that the Burman becomes really dangerous, and whatever may be the amount of opposition, whatever the damage inflicted by the Burmans in any future war with us, that amount will depend upon the number of muskets in their possession. This number must chiefly depend on whether they are prohibited from importing firearms through our territories or not."

Though the life of every subject is at the disposal of the king, and every male is liable to serve as a soldier whenever called on, the strength of a Burmese force must depend, not so much on the population, as on the number of men the king can feed in a collected state, or the amount the occupied districts can be made to support,—and the efficiency of this force, of course, on the number of muskets. When soldiers are required for war, the Hlwo-t-daw issues, under precept from the king, orders to the governors of provinces to collect the contingent they are bound to provide. The provincial rulers convey these orders to the myo-thoo-gyees and the taik-thoo-gyees (heads of townships and circles of villages), and by them conveyed to the village thoo-gyees. The mode of raising these levies differs in detail in almost every district, but the system followed in some districts now within our jurisdiction may be cited as an example. On the levy being called out, sixteen families were formed into what was named "one house," and were required to furnish two soldiers, and sometimes more. The selection of the conscripts rested with the thoo-gyees, and those selected were at liberty to provide a substitute either by paying a sum of money or by cancelling a debt. But generally the men fixed on were those unable to pay their share of the contribution raised from the people for the support of the contingent. The sixteen families had to provide their soldiers with arms and ammunition, and on leaving for service with one basket of rice (56 lbs) and money at the rate of five rupees per month for the number of months the duty was expected to last. When the

ammunition became expended, the officer commanding the contingent collected money from the soldiery and purchased a supply where he could. Ammunition is sometimes issued from the royal magazine at the capital.

Besides these provincial levies, there is a force of a more permanent character from which the soldiers on duty at the capital are drawn. These are supposed to be always prepared for service, and the villages or districts from which they are drawn are generally exempted from taxation. Several corps of these troops are dressed in uniform, but there is little indication of training or discipline. The officers are often most unfit,—petty traders or village accountants. These officers are as follows —

The bo-gyee, or commandant.
Two or three boe.
Thine-thouk gyees or captain of 50
Akyats, or captains of 10

The woon-gyees and other officers of state take the position of general officers on occasions.

When a service lasts longer than is expected, and the levies are at a distance from their own houses, contributions are levied from time to time on the people of the district for the support of their own contingents, but as little of this contribution ever reaches its destination, the soldiers are thrown on the resources of the inhabitants, and, unchecked by their chiefs, they plunder and harry at will.

The advent of troops to any district is looked on with great horror by the villagers, and soldier and robber are considered nearly equivalent terms.

With all the deficiencies of the Burmese soldier he has one great advantage over our disciplined troops, he requires no commissariat. At one end of his musket he carries his mat to sleep on, at the other his cooking pot. Round his loins is bound a wallet of the rice, which, with a few chillies, composes his simple fare. These and the dha with which he entrenches or huts himself complete in his idea every requisite for a campaign.

Captain Hannay, who accompanied a Burmese force to the frontiers of Assam in 1835-36, describes their manner of marching. "The men," says he, "to the number of 800 march in single file, each man occupying a space of six feet, being obliged to carry a banghy containing provisions, cooking pots, &c., besides his musket, strapped to the banghy stick. This is the most common mode of marching, but some carry their provisions in baskets, which they strap across their forehead and shoulders, having their arms free to carry their muskets, but as to using them, it is out of the question, and I should say the whole party are quite at the mercy of any tribe who chose to make a sudden attack on them." If, however, their manner of marching shocked Captain Hannay's military ideas, the celerity with which they huddled themselves in the jungle excited his admiration. He continues "On reaching the encamping ground these men gave proof how well they

were adapted to this mode of travelling, for in an hour after their arrival, every individual had constructed a comfortable hut for himself, and was busily engaged cooking his rice, which, with the addition of a few leaves from certain shrubs in the jungle, forms the diet of the Burmese soldier on the march." The inhabitants of certain districts are especially considered the hereditary soldiers of the Alompa dynasty, holding their lands in tenure by military

service Mout-shobo, Madeya, Aloung-myo, Dibayen, and Kunm-myo, are the most important of these districts. Though their fighting men are an undisciplined rabble, they are looked upon by the Burmans themselves as among their best and bravest soldiers. They have always been noted for their attachment to the present race of kings. The Burmese inhabitants of Amarapoora and Sagaing would prove equally loyal.

The military organisation, as far as it goes, is as follows. The soldiers are formed into bodies of 500, two such bodies being associated together in a manner similar to the union of two battalions in one regiment, one body being termed the "North," and the other the "South," "five hundred."

The officers with the permanent force are very inferior in point of qualification. They are as under —

Officers to a battalion

1 bo-gyee or commandant.	10 captains of 50 ' thwe-thoonk gyees.
5 bos or centurions	50 sergeants.
2 adjutants	

The above numbers are from the *Mandalay Gazette* of 1879, and from the same authority I give the following enumeration of the troops in and about Mandalay in 1879 —

Infantry

* 5 'inner regiments average numbers	1 020 = 5 100
† 9 'outer regiments	1,268 = 3 800
‡ 11 battalions	300 = 4 945
	<hr/> 13 245

Cavalry

5 regiments each probably numbering	500 = 2 500
	<hr/>

Artillery

Probably	500
	<hr/>
Total	16 245
	<hr/>

The bo-gyees and bos only seem to hold a position analogous to that of our commissioned officers.

As before stated, there is no distinction amongst the Burmans between the civil and military services. This is an essentially Mongol usage, and treasurers and magistrates are expected to be as well qualified for the command of armies as for the discharge of their civil duties.

A description of an army supposed to number 60,000 men is given by Major Snodgrass, which may be here inserted, as explaining the possible results, even at the present day, of an order for mobilisation — "The musketeers were estimated at 35,000. Great numbers were armed with jingals—a most annoying piece carrying a ball of from 6 to 12 ounces, and mounted on a carriage

* Of these, 3 had North and South battalions or wings, varying in strength from 350 to 850 each.

† The wings of these are termed 'right' and 'left.'

‡ Termed miscellaneous.

which two men can manage and move about at pleasure. The Cassay horse amounted to 700, and a considerable body of men was attached to the guns, which were carried from the river to the scene of action on elephants.

"The rest of the force was armed with swords and spears, and well provided with the necessary implements for stockading and entrenching."

If the system of levies fails, the treasury of the king of Burma cannot long support the expense of keeping troops on a paid footing.

A recent authority, well conversant with Burmese affairs, gives the following sketch of the present numbers and quality of the Burmese army. "The Burmese Government have plenty of guns of a kind, but few or no trained gunners, and very imperfect ammunition. They are far from being so well equipped in this respect now as they were 27 years ago, and our experience in the last war (1852) proved that their artillery was incapable of producing much effect. I question also the ability of the king to put 20,000 musketeers in the field under any emergency, and I have no hesitation in expressing my own personal conviction, that he would never send half that number beyond his own frontier while there was the remotest chance of a counter-attack being made on his capital. As regards the quality of his forces, I can only say that in my opinion a single brigade of troops, numbering between 2,000 and 3,000 men, would have no difficulty in routing and utterly dispersing the whole military forces of the king in the open field."

But though Burma has thus retrograded since the days when Snodgrass wrote his account, the manner in which the Burmans conduct war remains unchanged. The same natural obstacles as were encountered by the invading army in 1825 would be met with now by a force crossing the boundary of British Burma on its way to Mandalay, while the same measures of resistance would be adopted as were believed in by the Burmans of those days,—a war of defence by the construction of stockades at every point of importance, the absolute desolation of the invaded territory, and the removal of all supplies, carriages, &c., coupled with a necessary offensive when the levies could no longer be held together.

The high degree of art attained by the Burmans in the construction of defensive lines of stockades will be best understood by the description of the stockade encountered by our troops at Donabew. This extended, according to Major Snodgrass, for nearly a mile along the sloping bank of the Irrawaddy, its breadth varying, according to the nature of the ground, from 500 to 800 yards. The stockading was composed of solid teak timbers from 15 to 17 feet high, driven firmly into the earth and placed as closely as possible to each other. Behind this wooden wall the old brick ramparts of the place rose to a considerable height, strengthening the front defences by means of crossbeams, and affording a firm and elevated footing to the defenders.

Upwards of 150 guns and swivels were mounted on the works, and the garrison was protected from the shells of the besiegers by well contrived traverses and excavations. A ditch of considerable magnitude and depth surrounded the defences, the passage of which was rendered difficult by spikes, nails, holes, and other contrivances. Beyond the ditch, several rows of strong railing were next interposed, and in front of all an abattis 30 yards broad, and otherwise of a most formidable description, extending round the place except on the river face, where the deep and rapid Irrawaddy presented a sufficient barrier.

Before the right face, or that lowest down to the river, two strong outworks were constructed, while a heavy and extensive jungle intervened between the right and rear face, covering about a third of the latter.

In 1852 Captain C B Young, R E, describes two forts on the Irrawaddy above Prome as works very carefully and substantially built, and in a manner which would have done no discredit to a European engineer, being revetted throughout with stout posts and planks, provided with powder magazines of the best construction, and also with lean-to earth-covered casemates, to protect the defenders from the fire of shells, &c They also contained a long and capacious underground gallery for stores

The Burmese system of making approaches covered by rapid entrenchment is thus described by Snodgrass "When the formation of their troops was completed, the soldiers of the left column, also laying

Snodgrass.

aside their spears and muskets, commenced operations with the entrenching tools with such activity and goodwill, that in the course of a couple of hours their line had wholly disappeared, and could only be traced by a parapet of new earth, gradually increasing in height and assuming such forms as the skill of the engineer suggested

"The moving masses, which had so very lately attracted our anxious attention, had sunk into the ground, and to any one who had not witnessed the whole scene the existence of the subterranean regions would not have been credited The occasional movement of a chief with his gilt umbrella from place to place superintending the progress of their labour was the only thing that now attracted notice By a distant observer the hills covered with mounds of earth would have been taken for any thing rather than the approaches of an attacking army, but to us, who had watched the whole strange proceeding, it seemed the work of magic or enchantment"

The trenches were found to be a succession of holes capable of containing two men each, and excavated so as to afford shelter both from the weather and the fire of an enemy Even a shell lighting in the trench could at most kill two men Their troops are not relieved while making their approaches, each hole containing a supply of rice, water, and even fuel, for two men, and under the excavated bank a bed of straw or brushwood, to allow of one man sleeping while his comrade watches

One line of trenches completed, its occupiers, taking advantage of the height, push forward to where the second line is to be opened, their place being immediately taken up by fresh troops from the rear, and so on, progressively When not in the immediate presence of the enemy, the Burmese soldiery are said to be peculiarly open to surprisal, being generally heedless of the most ordinary military precautions Even when not taken actually unawares, they are easily disheartened by a bold and unexpected attack, and will not long maintain a struggle against a pushing and resolute, though numerically inferior, enemy

The chief assistant to the Burman in his system of guerilla warfare, and the main difficulty in the way of foreign enemies, is the climate of the country he inhabits,—malaria jungles and pestilential marshes, with rivers and mountain torrents, excepting during a comparatively short dry season, opposing the invader at every step *

By the Burman, obstacles of this description are, however, little regarded Half-amphibious in his nature, he takes to the water without fear or reluctance He is besides always provided with a chopper, and, expert in the construction of rafts when necessary, seldom encumbered with commissariat or equipage of any kind, he is at all times ready to move at the first summons of his chiefs, and when unembarrassed by the presence of an enemy, the Burmese

* This does not apply to Upper Burma (D M)

troops divide into parties, for the greater celerity of movement and provisioning of the men, each pursuing his own route to the place of general rendezvous

Of late years, the Burmese government have attempted to improve the efficiency of the troops, and the late king employed Europeans to organise his army, but a very small amount of success appears to have attended his efforts. The Burmese soldier being by nature indolent and averse to undergo any unnecessary labour, the foreign officers who were employed to drill him were obliged to cut down the drills and make them easy for him. Accordingly it takes a considerable time to impart but a small amount of instruction. From all accounts the best of these "drilled troops" are very indifferent, and cannot even march regularly, but move in a confused mob.

In 1879 a camp was established outside the city of Mandalay, at which about 16,000 troops were assembled, and were exercised in field manoeuvres by French and Italian officers.

The force consisted of—

Infantry	13 000
Cavalry	2,500
Artillery	500
	<hr/>
Total	16 000
	<hr/>

These officers estimate the numbers of drilled troops at 15,000 to 20,000, including the boatmen, or marine battalion, and the serviceable muskets at 12,000, namely 10,000 rifled muzzle-loaders and 2,000 flint muskets.

It is probable that few of the so-called serviceable muskets are really so, as they have been lying in the palace uncared for, and covered with rust, for years.

A number of brass rifled guns of small calibre have been turned out of late years, some of which have been reported by the Resident at Mandalay as of good quality. Mr M G Johnson, who was for some years Civil and Mining Engineer to the King of Burma, seems to have a poor opinion of them. In a letter to the Secretary of State for India, 5th April 1879, he writes "Their guns are of the very worst construction. At one time every gun was tested immediately on leaving the arsenal, but as every gun so tested invariably burst on the first trial, the experiment was considered too expensive, and testing was abandoned." Attempts have been also made to construct breech-loading guns and rifles, gatling guns and torpedos, but with what success is not known. One torpedo is known to have been constructed, and having been loaded with 20 lbs. of dynamite, was left lying on the side of the road.

Mr Johnson further says "The whole force of the Burmese army may be said to be concentrated at Mandalay, and my experience tells me that the influence of the king and court does not extend beyond a radius of 50 miles around the capital, and beyond 10 or 20 miles on either side along the banks of the river Irrawaddy." Since the accession to the throne of the present king, nearly all the Europeans have been discharged from the Government service. According to the Rangoon newspapers, the king has recently enrolled a body of three thousand Chinese troops.

There is no doubt but that the Burmese authorities are most anxious to improve the quality of their soldiers. During the two months I was in Mandalay there was ball firing going on almost daily. The men were paraded round the palace on the east and south sides of the enclosure, and here they squatted down until the order was given to march. They were then marched out of the east gate, and to the east of Mandalay hill, where the butts are situated. Their arms are so bad that good shooting could not be expected from them. On these occasions they wore a sort of loose coat and puttees. The musket was always carried with the stock over the shoulder and the muzzle pointing into the back of the man in front.

When in full dress, the infantry wore red tunics, red lacquered helmets with a brass plate in front, bright blue trousers with scarlet stripes, and looked very gay—but like anything in the world but soldiers.

At one stroke of the gong, they knelt down and shikhoed, at another stroke they stood up, looked about them, and conversed cheerfully with their neighbours.

They sometimes marched in column of sections, and sometimes in fours. Each company was preceded by a couple of standards on lance poles, and every regiment had the name of some animal or reptile to distinguish it. For example, one regiment would be called the "regiment of the dragon," and the men belonging to it would be provided with a tattooed dragon on the small of their backs. Another regiment would be the "battalion of the lion," and its soldiers would in like place and manner be adorned with the picture of a lion.

There were about seven regiments about Mandalay, or 7,000 men. These were the so-called regular soldiers. They were strong, well-seasoned looking men, and with proper drill and discipline would, I have no doubt, make good soldiers. I should think the average age would be over thirty years, and the average height 5 feet 4 inches, but all were strong, muscular men.

There were some bullock batteries. These were small popguns about 1 or 2 inches diameter and 18 to 20 inches long on fine strong hullocks. These bullocks also "shikhoed" by dropping on their foreknees when the men did so, and again rose when the gong sounded "rise up." It was intensely ridiculous to think of the trouble that must have been wasted in teaching these animals to salaam to the king while they were carrying harmless popguns incapable of doing injury. There were some ammunition wagons neatly got up and adapted for bullock draught.

The cavalry—men and ponies—were there in exactly the same dress and irregularity as described by Snodgrass and Laurie. The small ill kempt ponies, the enormous leather saddle flaps, the sowar sitting with his knees into his chin, and seeming to hold on by his heels. There they were duty and disorderly—the most irregular and useless cavalry in the world.

For cavalry purposes, the Burmese pony may be at once disposed of as entirely unsuitable. But for mounted infantry he would be invaluable. The hardy little creature will carry any weight, and will scramble over any ground, through mud and water, and may be relied on to do his five or six miles an hour for some hours—say three or four. Easily and cheaply fed, requiring no care, and never sick or sorry, a couple of thousand of these during a campaign would give a great advantage to the side that possessed them.

Colonel Horace Browne, who was Resident of Mandalay for some time, and probably the most intelligent officer who was ever in Burma, wrote as

follows about the Burmese soldiers, and the warlike preparations by which the Burmese Government sought to intimidate the British Government in 1879—

“When I am asked whether I consider that these outward and visible military demonstrations are so formidable as to be a serious danger to British territory, I can only reply that by themselves they are not a direct source of danger to anyone outside of the king’s own territories. I think that the only feelings which an examination of the military preparations here would excite in the mind of any military man looking at them from a military point of view would be feelings of intense amusement and ridicule. No one, I think, acquainted with the people could seriously maintain that the crowds of ill-armed, frightened villagers, who are kept in the ranks only by attaching a ‘flogging man’ to every ten, could ever be a source of danger to any foreign enemy.”

“Such information as I get leads me to believe that there is hardly a man in the so called regular army who has the slightest intention of being constrained to do any real fighting.”

“The feelings of those belonging to the artillery force I do know with tolerable certainty. These men are nearly all descendants of the Portuguese and French colonists of the sixteenth and seventeenth centuries. From their foreign descent they are supposed to have some special aptitude for gunnery. They are now Burman in appearance and habits, and in everything except religion. But they are all Roman Catholics, and their priests know them thoroughly. To their priest they make no secret of the fact that the first appearance of a foreign enemy across the frontier would be for them the signal of ‘every man to his own village.’ The idea of shutting themselves up in any of the new-fangled forts they laugh to scorn. ‘One shall from an English ship,’ they say, ‘would blow us to pieces.’ The members of the other branches of the service perhaps are not intelligent enough to form such a correct appreciation of their own powers, but I have reason to believe that their sentiments are very similar to those entertained by the artillery.”

I first saw these remarks on my return to Rangoon from Mandalay, and I was much struck by the singular manner in which Colonel Browne’s information coincided with what I had myself heard.

I learnt positively that nothing would induce the soldiers to fight. They knew they had no chance against British troops, armed with breech-loaders, and would not even fire a shot, if an enemy appeared. They were discontented, having received no pay for a long time, and moreover they did not approve of the state of affairs in Mandalay. They seemed fully aware of their own shortcomings in the matter of drill, arms, and officers, and quite settled in their determination not to fight.

In the present day the Burmese soldiers cannot fight even the Shans successfully, and the Burmese troops have been expelled from all the Shan territory from Thong-zei north of Mandalay to Monay on the British frontier. Only fifty-two years have elapsed since the first Burmese war. Then Burma was a first rate Oriental power, and the country full of victorious soldiers. It was something in those days to be a Burmese soldier. There was always plenty of fighting, plenty of loot and slaves, if victorious. If he fell, it was on the glorious battlefield, where he had perhaps done his full share of the fighting. Now he has no fighting, or if he fights, it is only to be overcome, no loot or slaves, not even his legitimate pay. What wonder is it then that the martial spirit has died out, and that the Burman, far from seeking the army as a career, does his best to shun it (*D M*, 1882)

The Burmans make gunpowder all over the country At Mandalay the powder mills are on the Shway-ta-choung, north-west of the city The powder, I believe, is not good.

Percussion caps are also made, but they are very bad

Small rifled cannon are made at Mandalay, but they are not now tested, as it was found that they invariably burst at the first trial

THE NAVY

The king of Burma's navy consists of the old-fashioned war canoes and a few steamers he has armed with small cannon The war canoes are long and narrow, and are usually paddled by 40 to 60 men The arms are stowed in a rack running amidship The armed steamers are of little account

Gunboats in possession of the Burmese Government

No	Name	Power	Draught	Armament	Remarks
1	Bandoola	H P 75	6'	8-9 pra.	This is a paddle boat of about 200 tons, built at Mandalay by a Burman Her length is 120 feet, and her breadth 21 feet. Her armament is from 8 to 12 guns She is lying at Mandalay in a dirty condition with only some half a dozen men to look after her
2	Yaythanayintha	Unknown	3' to 5'	None	Iron paddle steamer, length 150 feet, breadth 18
3	Sitgwayinbwin				Iron steamer
4	Myinyanyintha				Built of wood at Mandalay under European supervision. Not so heavy as the Bandoola. Length 180 feet, breadth 21
5	Yaythanayingo				Iron 180 feet long, 21 broad.

Steamers belonging to the Burmese Government

No	Name	Power	Draught	Tonnage	Remarks
1	Sitkyayinbyan	about 90	about 4'	280 tons	Iron sea-going screw bought by Mr Jones in 1870-71
2	Yaynansitkya				{ Iron side paddle 260 by 40 feet, about 17 years old
3	Sitkyayinman				
4	Yayhanayinbyan	about 75	about 3'	200 "	{ Iron stern wheel steamers, about 200 feet long and 21 broad.
5	Toolooyinbyan				
6	Toolooyinhan				
7	Sitkyayinhlau	about 60	do	100 "	{ Iron side paddle steamers, about 100 feet long by 14 broad
8	Doungyinbyan				
9	Goodin				
10	Mandalay	Unknown	Unknown	Unknown	{ Same as Nos 8 and 9, but slightly smaller
11	Dauygyinbyan				{ Small iron side paddle, sold to Burmese Government by Mr Cotton in 1878.
12	Star of Burma				

N B - The Burmese Government possess also 10 steam launches of various sizes, lying moored along the banks at Mandalay Some of them have a man or two in charge, others are quite deserted (D. M., 1880).

CHAPTER VIII

BURMESE FORTS.

ALONG the course of the Irrawaddy between the British frontier and Mandalay, a distance of over 300 miles, there are many strong positions where an invading force could be checked, besides those already fortified. In former wars Burmese generals have displayed much military genius in the selection of positions, and engineering skill in strengthening them. Nevertheless it is at present quite impossible to say with any certainty what positions would be selected in the event of a war, as it would depend entirely on the caprice of the general in command at the time. I will, however, after describing the forts, mention a few places which appeared to me the strongest on the river.

FORTS ON THE IRRAWADDY

Unfortunately for themselves, the Burmans have given up their teakwood stockades and taken to brick and mortar forts of European construction. In his stockade the Burman was at home, and would stick to it as long as his flank was not turned, and he knew its capability of resisting artillery fire. In a masonry fort he is not happy, it does not suit the genius of his people, and he has no faith whatever in it. In this he shows much reason, for the present structures along the banks of the Irrawaddy, dignified by the name of forts, are of little resisting power and not to be compared, in point of strength, with the tough teakwood stockades of former days.

The following are the forts on the Irrawaddy —

1 Koolee-gone or Koolee-gyoung	Left bank.
2 Myin hla	Right bank.
3 Ava Redoubt	Left bank
4 Sagaing Redoubt	Right bank
5 Ava Wall	Left bank.
6 Tha-bya-dan Redoubt	Left bank

The Koolee-gone redoubt is situated on the left bank of the river

opposite Myin-hla, on high ground estimated to be 450 feet above the level of the river. It is only 35

feet from the edge of its steep bank.

"The trace of the work is rectangular, without bastions or flank defence of any kind, and without a ditch. Its length from north to south, as ascertained by pacing, is 240 feet, and breadth 155 feet. It is apparently divided into two portions. The northern part is a walled redoubt 155 x 112 feet. The mean

height of the walls, which are loopholed, is 12 feet, they have a banquette in places. This portion of the work has two openings, one on the north-east corner 7½ feet wide, and one on the west 3 feet wide. They are closed with wooden doors, and there are no traverses. Inside the redoubt are two masonry barracks 64 x 47 feet. The parapet walls on the roof of these are loopholed, and have apparently a command over the northern wall. The southern wall seems to have a command over the barracks and northern wall."

An opening in the south wall communicates with the southern portion of

the work, which is enclosed by an earthen parapet, the space inside being 76 x 155 feet. The southern parapet is 27 feet wide at the base, and has six smoothbore guns mounted

in barbette The flank parapets extend about 50 feet beyond the south face, and serve as traverses to protect the guns On the west parapet a gun is mounted, on the east parapet is a sentry box In front of the guns stretches a natural glacis for about 100 yards Under the parapets are said to be chambers for ammunition and to protect the troops These were not seen

The garrison are quartered in huts a little to the east of the fort The huts are protected on the south and west by a low parapet of earth This parapet on the south extends towards the redoubt, and is only separated by a ditch 5 feet deep with masonry escarp and counterscarp There are no defences for the huts on the land side, and the ground on which they are built is evidently a few feet higher than the fort, the latter being on the slope of the hill and the huts on the flat top The commandant of the garrison lives in one of the huts to the north-west corner of the redoubt outside of it

The armament is variously stated to be ten and seven guns

The garrison consists of 500 men Nothing is known as to their arms They are regulars, and are periodically relieved

No magazines or workshops are said to exist inside the fort. There is no information as to the water-supply inside No access to the interior was allowed — (*Native information*)

Note by Major MacNeill — I passed this redoubt twice in December 1881 and January 1882 I could not land, but I sketched and photographed it from the river The description given by the native explorers appears correct The southern face commands the river for over two miles The western face must be low, as I could see footpaths crossing the ramparts There can therefore be no ditch

There were no guns mounted when I passed, except two small jingals of 1" or 2" bore I was informed that there were ten of these in the redoubt

A small force of artillery are the only people permitted to enter the fort

There are 500 soldiers quartered in huts outside, under the command of an Italian officer These troops are said to be well drilled But it did not appear that they were armed with rifles

The ground on the western side slopes gently down to the river in a long spur The eastern rampart is said to be low and easily crossed

The plan of attacking this or any Burmese fort will depend entirely on the armament in it at the time, its garrison, and the strength of the attacking party The following may be suggested as a fair general plan, applicable with modifications to all circumstances

The attacking column having arrived at Patanago, the gunboat or boats pass on, accompanied by a small body of infantry, and anchor about 2,000 yards below the fort, which they proceed to shell

Meanwhile a British regiment will land and advance over the hills on the fort.

According to native information, there is a good road from Patanago to the fort five miles distant The troops, with a mountain battery, could reach some rising ground east of the fort, and shell it if necessary The

Burmese soldiers could be disposed of in a very short time. This operation might be completed in two hours from the time of disembarking.

The road from Patanagó is not commanded by the fort until within 200 yards of it, and if the attack took the form of a *coup de main*, as it should do, there would be little likelihood of any obstructions being met with.

The position on which this fort is situated is well chosen, but the work itself appears contemptible.

A few shells from a 40-pounder would knock it to bits.

Paya-gyee village is only half a mile from Tat-kone or Koolee-gone. Its height is estimated to be 300 feet. A cart road leads to this place from Patanagó.

There is another hill, with a pagoda on it, near Gway-kone village. It is about 120 feet high, it is 400 paces from the fort, and about 500 paces from Paya-gyee village. The deep channel for steamers is about 200 paces from the fort.

The depth of water at Patanagó is not exactly known, but it is said to be sufficient to admit of the steamers lying close to the bank.

The building called Myn-hla redoubt is nearly opposite Koolee-kone. It is a square of about 200 feet,—thick masonry without ditch or flank defence of any kind. The walls are nearly 20 feet high. On the north west side a large part has been carried away by the floods, which cover all the surrounding land with water. It is entered from the western side by two staircases, which, sloping from north and south along the face, meet at the top. There were no guns nor garrison in it when I passed in 1882, and I think it most likely that one or two floods will make an end of it.

The fort west of Ava is called the Sin-gone fort. It is a square, each side measuring 250 feet. Outside the fort is a ditch, whose outer and inner face is lined with masonry. It is 18 feet deep and 25 feet wide. The gate is on the east side of the fort, and to enter it a movable bridge is laid over the ditch. There is only one flight of steps to get down inside.

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The rampart is 12 feet high and its sloping width 15 feet. There is a depression of 4 feet, lined with brick on the inside, and behind this, covered by the rampart, troops can fire from the top of the brick magazines. The ramparts will admit of cannon and mortars being mounted on them. The breadth of the magazines is 15 feet, and a parapet of masonry 4 feet high protects the inner edge. These magazines do not at present contain any ammunition when required, this will have to be placed in them. In September 1880 there were 55 men in the fort, each armed with a musket. The quantity of ammunition was, however, small, and would only serve for a few rounds per man. Each man is furnished with a pony, and the men live with their wives within the outer rampart on the east side next the gate in small huts of bamboo and thatch. The ditch outside the fort contains water during the rains, but dries up in the months of December and January.

To the north the glacis slopes down to the banks of the river for about 80 paces. At 500 paces west of the fort lies a village. On the south there is a level plain one mile in extent which is planted with rice, maize, peas. Between the fort and the village there is a plain, with an occasional tree planted here and there.

East of the fort up to the river Myit-ngay the bank of the Irrawaddy is lined with a wall of earthwork. Between the fort and the Myit-ngay there

are five gates. At each gate there are two parapeted works, one on each side, projecting 10 feet to the front, and there are four bastions, one at each angle. The plans and sections give the dimensions in feet. The wall is not broad enough to admit of heavy ordnance being placed on it.

Near the eastern corner of the city there is a spot coloured red on the map, the height of which is on a level with the outer brick wall. The spot is constructed of brick, and is therefore exceedingly strong. On the top of it there are wooden monasteries and a brick monastery. The brick monastery is 50 feet high. The roof would serve admirably for guns to be mounted on top. These monasteries would shelter 1,000 troops comfortably. South of these monasteries 500 feet is a village consisting of many houses, among which are those of the atween-woon, the secretary, the inspector of police, as also the telegraph station, and the bazaar. West of the city there are two bridges of masonry over the ditch. Going by the road from these bridges the Sin-gone fort is 850 paces distant. The village near the city is called San-ya. South of the village, following the road along the ditch, one comes to a road south of the Tada oo (head of the bridge) bazaar, which leads to the Shan states — (*Native information, 1881*)

From the walls of Ava, both Sagaing and Tha-bya-dan forts could be bombarded. The banks of the Irrawaddy are from 200 to 250 feet from the walls.

Note by Major MacNeill — The explorers' descriptions of the redoubt appear correct, as far as could be judged when passing it in the steamer. It is close to the embankment. There were no guns mounted when I passed, nor do I believe there are any platforms for them.

The embankment of Ava is of earth with an exterior revetment. It appeared much the same as the Mandalay embankment, only better revetted. It can be crossed in most places.

It would be easy to take the redoubt and embankment by direct assault. There would be no occasion to go round the flank, and even if it was armed with the best guns the Burmans possess, a few shells would silence them.

I was informed at Mandalay that the Sagaing redoubt was precisely the same as the Ava one in size and construction, except that it had no ditch. It appeared to me, looking at it from the river, to answer this description. I looked carefully all over the right bank, but failed to see any other fort. There are certainly some buildings which might easily be mistaken for native forts, and possibly may be, but the only work which I saw deserving the name was the redoubt a little above the Ava one.

It may be as well, however, to give the native explorer's account of it.

The Sagaing fort is situated on the right bank of the river, close to the bank, and within the village of Sagaing, a portion of which is enclosed by a parapet on three sides. The fort consists of a rampart 8 feet high and 10 feet wide, with interior and exterior revetment walls, the face and flanks of the rampart being towards the river. A loopholed wall extends the flanks to 150 feet inland, and the gorge is protected by a walled curtain, with walled bastions at the ends for flank defences. The space inside is extensive.

The garrison is said to consist of 156 men. No access is permitted to the interior.

There is a masonry breakwater, which also appears to be a small harbour, on the east.

There is no information as to armament, magazines, or water-supply inside.

The fort is surrounded up to its walls by trees and huts. The buildings inside are of wood, with tiled roofs.

It is commanded by high ground behind, from which however it cannot be seen, owing to the jungle.

The-bya-dan fort. The explorer gave the following description of the fort.

The lowest layer consists of a platform of masonry 3 feet deep. On the north and west sides from the ground there are four thicknesses, including brick magazines. On the south and east sides there are three thicknesses, including the brick foundation and brick magazines.

The outer brick foundation is three feet high. Then comes a level four feet broad, then comes the rampart, with a height of 10 feet and a sloping breadth of 20 feet, revetted with 3 feet of brick. Four feet below this is a terreplein 25 feet wide, and rising from the end of this is another rampart 15 feet wide and 20 high, revetted with three feet of brick. The parapet is 4 feet, and the terreplein 20 feet, lined with brick. Below this are magazines. There is also a parapet on the inner edge. The interior of the work is 155 feet. There are four entrances to the magazines, *viz*, one on each side. On the east side there is a gate and on the west a sally port. Leading to the space between the two ramparts over the eastern gate there is a flying bridge for the convenience of the garrison.

Fifty feet in front of the eastern gate is a mass of earth 80 feet long by 50 broad and 18 high. The top is 5 feet wide.

There are four ranges of stables for the accommodation of the men. The garrison is relieved every three months from Mandalay.

Two hundred and fifty feet south of the redoubt is the village of Tha-bya-dan, consisting of 15 houses. South of the village is a plain of tall coarse grass 6 or 7 feet high called "kaing," with trees here and there. To the west of the redoubt bean and maize fields extend as far as the month of the Myit-ngay.

East of the redoubt and some 2,000 paces distant is the hill of Shway-gyay-yet.

Note by Major MacNeill—There is no ditch or flank defences of any description, no guns, and no platforms. The ground on which it stands is covered with water during the floods, and it stands a good chance of being washed away.

There is no gate in the gateway and, as usual in Burmese forts, there are footpaths across the ramparts.

Any steamer with a few companies of rifles on board could run close up to this redoubt, and there being no protection for the gunners, the rifles could prevent a shot being fired, while a couple of companies could land and rush the place.

There is not a gun at present on any one of the forts I have described, and as all the available guns are kept in the palace at Mandalay, they could not be mounted under 20 or 30 days, as there are no platforms nor carriages for them.

If mounted, they would have to be "en barbette," and the Burmans would never work them exposed to our rifle fire.

It would not be worth while, if we had gunboats, to land troops and turn them, as, with the exception of Ava, they can be run over without difficulty.

A flotilla steamer or two, with a couple of 6 3" rifled howitzers, could anchor a thousand yards or so below and blow them to bits.

General Blake makes the following remarks on the attack of Burmese positions. "Burmese fight obstinately behind stockades, but are as timid as sheep if they have any idea that an attempt is being made to turn their flanks. Therefore I have made it one of my axioms to spare my men. Should I have an opportunity, only to make a false demonstration in front, and at any loss of time (unless other serious matters would be involved in the same) to cut my way through the jungle, and thus to turn the flank or get to the rear. Here the Intelligence Department becomes of vital importance, and here also the great advantage of knowledge of the language of the country" (*June 1875*)

There are few positions on the Irrawaddy which are not commanded by some adjacent ground. So that to occupy the strongest ones would require a much larger force than the Burmese king would allow to go to any distance from the capital in time of war.

In the first Burmese war Malloon and Pagan-myo were the two places selected to check the British advance.

As to the former, it was badly chosen, being on the side of a sloping hill, and within easy range of the artillery stationed on the opposite bank (Patanagó), only 600 yards distant.

Pagan is a better situation, as there is material enough in the old pagodas to construct any works.

The strongest positions on the river are—

- 1st.—At No 1 Island (Toung-dwen) below Patanagó
- 2nd.—Koolce-kone, holding Patanagó as well.
- 3rd.—Silay rock
- 4th.—Pagan
- 5th.—Sagang, Ava, and Shway-gyay yet hill.

Of course, in a line of river over 300 miles, there are many other good positions, but it would be confusing to give each place that might with advantage be defended. I have therefore selected the above five positions, which appear to me capable of being turned to more account than any of the others.

CHAPTER IX.

HOBOLOGY, CURRENCY, WEIGHTS, AND MEASURES.

THERE are five different eras known in Burmese chronology —

- (1) The Kaw-dza era—which after lasting for 8,650 years was abolished by the grand father of Gaudama in B.C. 691.
- (2) Bhodaw Een tee-na's era—which lasted till Gaudama's death in B.C. 543.
- (3) The religious era—which was current until A.D. 82.
- (4) King Tha-moon-da-nit's era—established A.D. 82 at Prome, and lasted until A.D. 639.
- (5) The present era—established in A.D. 639 by Pappa-saw Bahan, who usurped the throne of Pagan.*

The ordinary year commences in April, and consists of twelve lunar months of twenty-nine and thirty days alternately, and every third year a thirteenth is intercalated between the fourth and fifth.

The names of the months are as under —

Tagoo	About	April
Ka-shoon	"	May
Na-yoon	"	June
Wa-shoo	"	July
Doo-tie-ya Wa-shoo (intercalated every third year)		
Wa-goung	"	August
Ta-tha-leng	"	September
Ta-deng-gyoot	"	October
Ta-shoung moon	"	November
Nat-daw	"	December
Pya thoo	"	January
Ta-bo-dwai	"	February
Ta boung	"	March

Each month is divided into two parts,—the waxing, which lasts from the 1st to the 15th, and the waning, from the 16th to the end. The year is further divided into periods of seven days, which follow each other. The days are named after seven of the planets —

Ta-neug-ga-nway	Sun's day
Ta-neugla	Moon's day
Euga	Mars day
Boodha-hoo	Mercury's day
Kyee-tha-ba-de	Jupiter's day
Thouk kya	Venus day
Tsa-ne	Saturn's day

The night and day are each divided into four periods. A day and night are divided into sixty hours, and these into sixty 'bee-za-na', each bee-za-na into six 'pran', each pran into ten 'kha-na', and each kha-na into four 'na-ra.' The na-ra lasts as long as it would take to wink the eye ten times, and, except for astrological purposes, is seldom used.

The Burmans have no instruments for keeping the time, which is sometimes indicated by a reference to the position of the sun or moon, as—"in the morning when the sun was a fathom above the horizon", "when the sun was a tari tree's height", "when children go to bed", "when lights are lighted", "when grown up persons go to bed", "before the sky was light." A period is spoken of as—"the chewing of one mouthful of betel," or ten minutes, the "boiling one pot of rice," or twenty minutes.

Distances are described as "a call," or about two hundred yards, "the sound of a gunshot," or half a mile, "a stone's throw," fifty or sixty yards, "breakfast distance, as far as a man could walk before that meal," &c., between 8 and 9 A.M.

The following measures of distance and weights and measures are given in Crawford's *Mission to Ava** —

Measures of distance

10 cha-k'byis, or hair breadths	= 1 nhon (sesamum seed)
6 nhons	= 1 mo-yan
4 mo-yans	= 1 thit (finger breadth)
8 thits	= 1 maik (hand breadth)
1½ maik	= 1 thwa (span)
2 thwas	= 1 toung (cubit)
4 touns	= 1 lan (fathom)
7 touns	= 1 ta (bamboo)
1,000 ta	= 1 tang (nearly two English miles)
6,400 ta	= 1 yoo-za-na.

Weights

2 small rwe	= 1 large rwe	1 piee.
4 large rwe	= 1 bau	1 anna.
2 baus	= 1 mu	2 annas.
2 mus	= 1 math	4 annas.
4 math's	= 1 kyat	1 tical.
100 kyat	= 1 pent-tha	3·652 lbs. avoirduois.

Measures of capacity

2 lamyata	= 1 la-may
2 la-may	= 1 tsu-lay
2 tsu-lay	= 1 khwet.
2 khwet	= 1 pyee
4 pyee	= 1 taet.
4 taet	= 1 teng

The 'teng' is called a basket by Europeans, and ought to weigh 16 viss of clean rice or 58½ lbs avoirdupois. It has commonly been reckoned at half a cwt. All grains, pulses, certain fruits, salt and lime, are bought and sold by this measure, other commodities by weight.*

With regard to Burmese currency, Captain Yule observes "The old travellers of the sixteenth century talk often of *gansa* as a mixture of copper and lead, apparently stamped, which was the current money of Pegu in that age. Copper is not in any part of Burma used as currency now, but lead is commonly passed in all the bazaars for small purchases. It is used in rude lumps varying from half an ounce to a pound or so in weight. The price was 100 viss of lead for 6½ ticals of the best silver"†

Gold in reference to its purity is divided into tenths or *moos*, pure gold being of ten *moos*, and the best current among the merchants nine and a half. The best gold commonly fetches nearly twenty times its weight in silver. The purest silver current in Burma is called *bau*. It contains three or four per cent alloy. The variety next in purity is *khayobat*, and consists of nineteen and a half parts *bau* to half a part of copper.

Next comes *dau*, the purest kind of which contains about 96 of absolute alloy. All the China trade is carried on with *dau*.

Dau and *khayobat* are cast in large discs weighing 20 ticals and upwards.

Ywet-neo (red leaf) or flowered silver contains fifteen per cent copper to eighty-five of *bau*. This is the standard currency in which business is transacted and accounts kept.

Cowries are never used for small currency in Burma. But rice is often used in petty transactions in villages.

The late king established a mint, but the coin (silver) issued is very bad. It consists of—

One rupee piece	Four-anna piece.
Eight-anna piece	Two-anna piece.

The natives of British Burma will not take this money, as it is less in value than the British coin, which is current in most parts of Burma.

* Crawford, page 334.

† *Mission to Ava*, page 259.

CHAPTER X

GAZETTEER OF UPPER BURMA.

A

ADUN-LA—

A village of Lapee tribe of Singphoos.

AEN-GAN—

A people west of the Chin-dwin.

AGE-YA-LA—

A village of Lapee tribe of Singphoos

AIK-ENG—

A village in the Singoo and Nga district

AING-THA—

A village in the Singoo and Meza-choung district

A-LAY-HYOON—

A village in the Singoo and Mo-nyeng district In 1837 there were 1,235 houses

ALE-CHOUNG—

An island on the Irrawaddy north of Mandalay

ALE-CHOUNG—

A town on the Irrawaddy north of Mandalay

ALEET—

A village in the Singoo and Nanti district.

ALOMPRA, or ALOUNG-BHOORA—

According to San Germano, Alompra or Aloung-bhoora was a countryman of Mout-zobo, a town on the Moo river In 1754 he succeeded in collecting round him a hundred devoted followers He began by putting to the sword the 50 Peguans who formed the garrison of his town, and having defeated a detachment sent to take him prisoner, he spread abroad a supposititious prophecy and was speedily joined by numbers of Burmans He then advanced on Ava. When the Burmans in the city heard of his approach they rose and massacred the small Talaing garrison. At this time Alompra was known as Oung-za-ya In 1755 he defeated the Peguans in several battles and declared himself king According to the ancient custom of the Burmese sovereigns, he assumed a new name, choosing that of Aloung-bhoora (corrupted by Europeans into Alompra)

He was the greatest conqueror and king who ever sat on the Burmese throne He rose from being a petty myo thoo-gyee (some say only a hunter) to the throne of his country, and established a dynasty which still reigns in Burma. He found his country conquered and oppressed by a foreigner, and he left it extending from Manipur on the north-west to Mergu on the south-east He improved the administration of justice, and forbade the decision of cases in the private houses of the magistrates Every judicial order was passed in public and duly registered Aloung-bhoora died in 1760 while invading Siam, and was succeeded by his son Sit-kaing-meng (see Chapter I)

AMARAPOORA—

Thus, the late capital of Burma, was only discarded by the late king in 1858 It is situated on the left bank of the Irrawaddy in an inlet of the river about five miles from Ava. When Captain Browne visited the place in 1874-75, he found the wall and ditch which formed the defences of the

city in fair preservation, but the place was almost deserted by the Burmans, and was chiefly occupied by Chinamen.

The name is Pali, and signifies "City of the Immortals." It was founded by the fourth son of Alompra, known to us as Mentara-gyee Phra, who took possession of his new palace in May 1783.

King Mentara-gyee died in 1819 after a reign of 38 years, and three years later his grandson and successor abandoned the new city, and rebuilt the palace at Ava. In 1837 the Prince of Tharawaddy seized the throne, and after an interval of residence at Kyouk-myong again removed the seat of government to Amarapoora.

The abandonment of Amarapoora in 1822 was looked on as an ill-omened act, and the people had a notion that the disasters of the war of 1824-26 were connected with it. The royal residence had always previously, at least since a very remote era, been moved up the river, from Prome to Pagan, from Pagan to Panya, from Panya to Ava, from Ava to Amarapoora. The retrogression brought bad luck.

The city stands on slightly elevated ground, which in the flood season forms a long peninsula, communicating with the main land naturally only at the northern end. Walled embankments and wooden bridges, some of them of extraordinary length, connect this peninsula with the country to the eastward and south-westward. On the north-west side runs a wide creek from the Irrawaddy. The waters of the Irrawaddy retire from this in the dry season, and the small supply which is found at that time in the channel is derived from a tributary stream flowing down from the fruitful district of Madeya. The city, except in the high floods, is accessible from the present main stream of the Irrawaddy only near the extremity of the western suburb.

The eastern and southern sides of the peninsula are defined by an extensive hollow, which from July to November forms a chain of considerable lakes, filled partly by the flood waters of the Myit-ngay, a river of very considerable size and very contorted channel, which issues from the mountainous Shan country eastward of the city and joins the Irrawaddy close to Ava. The southern lake also communicates with the Irrawaddy direct by the channel which terminates the peninsula to the westward,—the Ta-jay-wa creek.

Captain Yule gives the following description of Amarapoora in 1855: "The city of Amarapoora is laid out in a square at the widest part of the peninsula. It is bounded by a defensive brick wall about twelve or thirteen feet high with a battlemented parapet. The wall is partially backed by an earthen rampart, but this is nowhere completed to any useful extent. The four sides are each a little short of a mile in length and are exactly alike, excepting that of the north west, where the river channel coming close under the walls, the angle of the square has been cut off obliquely. Each side has three gates and from eleven to thirteen bastions, including those through which the gates are cut. At an interval of about 100 feet from the walls a ditch nearly eighty feet in width extends along the east and west sides, the greater portion of the north, and about half the south. This ditch is from sixteen to eighteen feet deep, and has both escarp and counterscarp of brick. It contracts to a width of about twelve feet at the gates, and plank bridges are there thrown across it. A battlemented parapet runs as a sort of *fausse-braye* along the top of the escarp, and some of the gates are covered by meagre barbicans or traverses similar in character to the city wall.

"The materia of all these works is indifferent brick work built with mud mortar, excepting the gateways and the copings of some of the walls where lime is used. No cannon are at present mounted on any of the bastions (1855). The works altogether in the hands of the Burmans would probably be less formidable than a respectable stockade. Within these defences the streets are laid out parallel to the four walls, running from gate to gate and cutting up the city into rectangular blocks. The palace occupies the centre, its walls being laid symmetrically with those of the city. There is a gate in the centre of each of the four sides, but that to the eastward, or front, is only public. Each gate and side of the palace is under the charge of an officer of rank known as the 'commander of the north gate,' 'of the west gate,' and so on. Wherever the king may go by land or water, these officers are supposed to be in attendance.

"In the esplanade between the two walls of the palace enclosure there are not many buildings. The principal is the Hlwot-daw, or royal council house, where the ministers (woon gyees and woon-douks) daily assemble (1855). There is a large pavilion of timber standing near the gate, and within the inner palace wall is another considerable pavilion.

"Besides the Hlwot-daw, the esplanade contains large sheds for the accommodation of the attendants and horses of the councillors.

"Issuing from the eastern gate, immediately beyond the palace palisade on the right hand, stands the Yoom-daw, or royal court house for the city. This is a raised and open pavilion of plain substantial timber.

"Opposite the Yoom-daw is another pavilion of smaller size, called Tara-yoom.

"There are no brick buildings within the city walls, except the temples and a few in the palace.

"A large square pagoda marks each angle of the city just within the walls.

"The streets are very wide, and in dry weather tolerably clean. They are always free from the closeness and offensive smells of most Indian towns. There is no attempt at drainage, and in wet weather the streets are deep in mire, and some of the lower parts of the city are absolutely swamped.

"Large unoccupied spaces exist within the walls, and the population is not dense.

"The great majority of the cottages are mere bamboo huts slightly raised from the ground on posts.

"Along all the chief streets, at the distance of a few feet from the house front on each side, runs a line of posts and neat lattice hurdles, or palings, which are kept whitewashed.

"At the gates of the city are open timber guard houses. The gateway is merely, as it were, a bastion cut through.

"The gates are not arched over, but are surmounted by pavilions, such as one sees in pictures of Chinese towns. These pavilions are triple-roofed over the central or main gates, and double over the others. Smaller pavilions shade the bastions. The passage of the most frequented gates are the favourite stations for the stalls of petty traders.

"The houses of the princes, the ministers of state, and other dignitaries, generally occupy the areas within the blocks into which the rectangular streets divide the town. The best, such as that of the crown prince, are extensive and elevated timber structures, somewhat similar to the monasteries, but in plainer style.

"The approximate number of houses within the walls was found by Major Allan to be 5,834, giving a probable population of 28,670, and the whole capital was found to contain 17,659 houses, giving a population of 90,000. A much larger and denser population occupies the western suburbs, which nearly fills the projection of the peninsula from the city walls to its termination at the Sagyeen-wa creek.* An esplanade road 80 or 100 feet wide extends outside the ditch, and then the suburb commences. The streets are laid out with something of the same regularity as in the city, but with less width. In the main streets near the fort the foreign inhabitants chiefly dwell. Native subjects are not allowed to build brick or stone buildings without the king's permission."

The foreigners' houses are generally low, brick-built edifices.

"The Chinese ward occupies a large portion of the main street of the suburb, and a large proportion of the houses are built of brick. Their number probably amounts to nearly 2,000 families in the capital and the neighbouring villages.

"Passing westwards to the outskirts of the suburbs, the streets are shaded with noble tamarind trees. On the banks of the Sagyeen-wa creek, which bound the peninsula, are the densely peopled burying-grounds of the Chinese and Mahomedans. The creek is spanned by three fine wooden bridges, and from the extreme south-western point of the peninsula runs across the lake a long bridge.

"Close to the debouchure of the Sagyeen-wa in the Irrawaddy is a small quarter of some thirty houses, which borrows its name from the creek.

"Other suburbs of much smaller size and importance extend beyond the northern and eastern gates.

"In the northern suburb is the Ya-man-daw, or water palace of the king. It is an extensive timber building in the monastic style, and is elevated on piles over the edge of the creek. In the flood season it is completely insulated."

From the eastern part of the northern wall of the city and along the narrowest part of the peninsula two parallel roads run due north towards a temple about two miles from the city gates, called the Maha-myat muni, where the celebrated brass idol brought from Arakan in 1784 is kept. One of the roads leading to this temple is an elaborate raised causeway paved and parapeted throughout with brick work. For a great part of the distance this causeway is bordered on both sides with monastic buildings. The principal of these are the maha-toolut-bonngzoo and the Maha-oomye-peima. These two buildings both embrace extensive groups of monasteries and shrines, each group enclosed in its own walled area. The centre building in each case is a large kyong of the usual oblong construction, nearly 300 feet in length. The floor spreads in a wide platform.

Near the Arakan temple is the Mahayetna-boung-daw—probably the largest monastery in the country. This huge building, with its encircling platform, occupies a space of 440 feet by 200 and is supported on 40 massive teak trees, none of which seemed less than 2 feet in diameter and some at least 80 feet high.

The peninsula on the east of the city walls is bounded by a beautiful lake, or chain of lakes, dammed up by broad and solid bunds, and having the banks crowded with a vast number and variety of religious edifices.

Amongst these is a large and handsome kyong of brick work, built by a Mahomedan, Moung Bhai Sahib.

There is a good road from Amarapoora, which goes nearly straight to the village of Shan or Shan-ywa. It passes over a large extent of jheely cultivated country. During the rains this road is impassable.

The village of Shan-ywa is situated close to the junction of the Myitngay and Nadoung-gya, and is not more than $\frac{1}{2}$ mile from the large town of Shway-zay-yan. In the latter is an extensive group of temples clustered together on a rising ground to the north of the village. One of these is much revered. It is said to have been built by a Shan princess who became queen.

The entire group was greatly shattered by an earthquake in 1839, and only a few out of the number have been repaired.

The district of Amarapoora extends twelve miles along the river, and is about six in depth. It contains 45 villages — (*Crawford and Yale*).

It is a sad and melancholy thing to visit the present city after having read the above description. The walls are ruined

Present city

and falling to pieces, the city gateways gone. The ditch partly dry, and in some places cultivated, the bridges gone. Inside is a wilderness of ruined pagodas, kyungs and palaces, and where the houses of the city once stood the plough has turned the soil and produced crops. Trees grow all around, and the only redeeming features are the fields of grain and an occasional hut of a cultivator. I have wandered through the old city several times without meeting more than two or three persons, and these generally looking after the fields or gathering firewood. The old roads have disappeared, and there are only a few cart tracks which lead through it. The old palace walls still remain in part, and the site of the different buildings of the palace can still be traced, but not a stick of wood-work remains except in the kyungs, for the Burman is too religious to touch these, even if he were starving with cold. The native city is outside the walls, and occupies the part to the south west. It is chiefly occupied by Chinamen.

The population of Amarapoora was given as follows by a Burman, but whether correct or not I have no means of telling —

Brahmins	5 000
Chinese	3 000
Mahomedans	2,500
	<hr/> 10 500

It is only 25 years since Amarapoora was left for Mandalay. Yet it is as completely ruined as if a hundred years had elapsed, and it had been ploughed and sown with the view to obliterate all traces of its former greatness and magnificence.

Roads

There are no metalled roads through Amarapoora, but only cart tracks.

The palace enclosure would make a good site for a camp, and the old city would be more suitable as a camping ground than any place outside it.

AMBER—

The principal amber mines are in the Hookong valley. Captain Hannay visited them in 1837 from Maing kwon. He thus describes them: "We set out at 8 o'clock," he says, "in the morning, and returned at 2 P.M. To the foot of the hills the direction is about S. 25° W., and the distance three miles, the last mile being through a thick grass jungle, after which there is an ascent of one hundred feet, where there is a sort of temple

at which the natives on visiting the mines make offerings to the nats, or spirits. About a hundred yards from this place the marks of pits where amber had been formerly dug for are visible, but this side of the hill is now deserted, and we proceeded three miles further on to the place where the people are now employed in digging, and where the amber is most plentiful. The last three miles of our road led through a dense small tree jungle, and the pits and holes were so numerous that it was with difficulty we got on. The whole tract is a succession of small hillocks, the highest of which rise abruptly to the height of 50 feet, and amongst various shrubs which cover these hillocks the tea plant is very plentiful. The soil throughout is a reddish and yellow coloured clay, and the earth in those pits which had been for some time exposed to the air had a smell of coal tar, whilst in those which had been recently opened the soil had a fine aromatic smell. The pits vary from 6 to 15 feet in depth, being, generally speaking, three feet square, and the soil is so stiff that it does not require propping up."

"I have no doubt," Captain Hannay adds, "that my being accompanied by several Burmese officers caused the people to secrete all the good amber they had found, for although they were at work in ten pits, I did not see a piece of amber worth having. The people employed in digging were a few Singphos from the border of China and of this valley."

"On making inquiry regarding the cause of the alleged scarcity of amber, I was told that want of people to dig for it was the principal cause, but I should think the inefficiency of the tools they use was the most plausible reason, their only implements being a bamboo sharpened at one end and a small shovel."

"The most favourable spots for digging are on such spaces on the sides of the small hillocks as are free from jungle, and I am told that the deeper the pits are dug, the finer the amber, and that that kind which is of a bright pale yellow is only got at the depth of 40 feet under ground."

ANANDA—

A temple at Pagan, "is said to have been built in the reign of Kyan-yet-tha, about the time of the Norman conquest of England."

"Tradition has it that five Rahandahs or saints of an order second only to a Buddha, arrived at Pagan from the Hima woonda, or Himalayan region. They stated that they lived in caves on the Nunda moola hill (probably the Nunda Devi peak), and the king requested them to give him a model of their abode from which he might construct a temple. The Rahandahs did as they were requested, and the temple being built was called Nunda-see-goon, or 'Caves of Nanda.' The term 'Ananda,' by which the temple is now known, is a corruption, arising from the name of Ananda, the cousin and favourite disciple of Gaudama, being so well known to the people. The representation of a cave is a favourite style of building among the Burmans for depositing images. This is not wonderful among the votaries of a religion which regards an ascetic life in the wilderness as the highest state for mortals in this world"—(146)

ANIEN—

A town on the Chun-dwin

ANK KHYEN, or CHIN—

A village in the Singoo and Meza-choung district.

ARIMATTANA—

The sacred name of Pagan

ASHAN—

A village on the Taping

A-SHAY-YWA-THIT—

A village in the Singoo and Chouk-myong district In 1887 there were 100 houses

A-SHO-TOUNG—

A village in the Singoo and Chouk-myong district In 1887 there were 40 houses —(*Bayfield*)

ATET-HNYIN—

A village on the left bank of the Irrawaddy 1½ miles north of Ouk-hnyin Indian-corn is chiefly cultivated

ATSEE—

A Kachin clan

ATSI—

A village of Lapae tribe of Singphos

ATWEEN-WOONS—

Interior or household ministers, are four in number, though they, like the woon-gyees, have sometimes been as many as six They relieve each other in close attendance on the king, and are the immediate recipients of all orders from his majesty There is no question of their inferiority in precedence to the woon-gyees, but sometimes their influence over the king is much dreaded by the latter The atween-woons are often called by their own proper names, which is not usually the case with the woon-gyees By the atween woons is transacted, nominally at least, the extensive business arising in the present reign from the royal monopolies, at their office in the palace called the Bya-dett

AUK-CHIN—

A village in the Singoo and Than district.

AU-LAI—

A village in the Singoo and Meza-choung district

AUNG BEN—

A village in the Singoo and Meza-choung district.

AURAH—

A village of Lapae tribe of Singphos

AUREA CHERSONESUS—

The site of the 'Aurea Chersonesus' or 'Anrea Regio' of Ptolemy is still a matter of controversy It may perhaps have represented the delta of the Irrawaddy and the adjacent Malay peninsula Ptolemy describes the various rivers of the Chersonesus as communicating with each other, and which eminently applies to the waters of that delta His 'Mons Maxandrus' might be identical with the Yoma-toung range of Arakan mountains, and the river Besynga with the Bassein branch of the Irrawaddy The classic Pali name of Thatoon (the ancient capital of the Talaings) is 'Suvanna-bumme,' which, literally translated, means 'gold earth,' or 'place of gold' The Pali name of Sittang, too, is Suverna, which after dropping the final syllable *sa*, not uncommonly added to Pali names, resembles Souphair, the Greek name of Ophir Josephus, who had great opportunities of acquiring information on the subject, says that "they should go along with his own (Solomon's) stewards to the land which was of old called Ophir, but now the Aurea Chersonesus, which belongs to India, to fetch him gold" Ophir is thought by some authorities to have been Abhira, situated at the mouth of the Indus, and it was there that Solomon and Hiram despatched

their vessels. Again, the port of Cattigara, situated in Ptolemy's map in 8° S lat., has been assigned to Mergui, and Thien-nee, in like manner, to the Tenasserim coast—(*Rytche*)

Most of the Chin-dwin's tributaries from the east are auriferous, and hence perhaps the name of 'Sonaparanta,' applied anciently to the country between the two rivers and near their junction—not improbably the 'Aures Regio' of Ptolemy, which is, I believe, almost a translation of the Sanskrit name

AVA—

Advancing from Kyouk ta-loung, the successive ranges of hills to the east of the capital rise into view. The river is more defined in its channel, although a few low islands are scattered along. Low hills stretch along the horizon behind the banks of the river, and groves of palms still mark the dry grounds.

Passing Lapanzing, the huge pagoda of Koung-mhoo-dhan is seen in the flats on the right bank of the river, and shortly afterwards the ruined walls and buildings of the old capital Ava come into view.

AVA, or ENG-WA (*founded 1364 A.D.*)—

This city was one of the ancient capitals of Burma. It was founded by Thado-meng-bya in the fourteenth century under the following circumstances:

"When the Burmese monarchy was broken up at the end of the thirteenth century, Prome and Toungoo, as well as Myeng-tang, Peng-ya, Tsit-kaing, and Thayet, became independent. The governor of Prome at that time was a grandson of Ta-roop py meng, and consequently a cousin of Meng-sheng saw, the governor of Thayet. The Prome territories extended nearly to Thayetmyo, the northern boundary east of the Irrawaddy being the Nga-hiang-daing rivulet, which debouches nearly opposite that town.

"Na-ra-thoo, the king of Peng-ya,* unable of himself to overcome the ruler of Tsit-kaing (Sagaing), called in the Mogoon Shan from the north, who advanced under Thoo-kyeng bya and took Tagoung, where Re hoo-la was governor. He saved himself with difficulty, and escaped to Tsit-kaing, where he was imprisoned by his step-father. The Shans continued to advance, and made themselves masters of Tsit-kaing, Meng byouk flying with his court to Kya-khat wara on the Irrawaddy. The Shan chief, partly on account of not finding as much booty as he expected in Tsit-kaing, and partly on the ground that Na-ra-thoo had given him no assistance, turned his arms against Peng ya, which he plundered and then retired, carrying the king with him. The subjects of Meng byouk were much discontented, and Thado-meng-bya seized the opportunity and escaped, and capturing his step father put him to death. He advanced against Peng-ya, where Oo-za-na-byoung, an elder half-brother of Na-ra-thoo, but the son of a concubine, had been raised to the throne, and had been reigning for three months,—took it, put Oo-za-na-byoung to death, and in 1364 declared himself king of Peng-ya and of Tsit-kaing. He married Tsaw-oom ma, the daughter of Meng-sheng-saw, who was thus the wife of four kings in succession,—Kyaw-swa, Na-ra-thoo, Oo-za-na-byoung, and Thado-meng-bya."

The new king, who had no rival in the now reunited kingdom, founded a new city at Eng-wa (Ava) on the left bank of the Irrawaddy, and called it Ra-ta-na-poo-ra (i.e., 'City of Gems')

* Peng ya or Pang yan-gyeng the classical name being Wee-see-poo-ra was built where Ava now stands by Thee-ba-thoo, one of the three Shan brothers who dethroned and murdered Kyaw-swa, about the year 1800 A.D.

In 1404 the great Talaing king Ra-za-dhie-rit laid siege to Ava, but was unsuccessful

In the same year he again advanced with a large army, laid siege to Prome, and moved to the west bank of the river Meng Khoung, the Burmese king, relieved Prome, but had to sue for peace, as the Talaing cut off his supplies. The two kings proceeded together to the Shway-tahan daw pagoda, where they solemnly promised to observe peace. A short time afterwards Ra-za dhie-rit married Meng Khoung's sister.

The peace was of short duration. A brother of the king of Burma, who had rebelled against him, took refuge with the Talaing king, which so incensed the Burmese monarch, that he made preparations for invading Pegu. This did not come off immediately, as events in Arakan and a Shan rebellion had diverted his attention. When he learned of the Talaing success in Arakan, he moved his army on Pegu via the Sittang valley. The Talaing army moved against him, but being repulsed retired on Pan gyaw, and the Burmans ravaged the country. When the rainy season came on, the troops began to suffer, and Meng Khoung, thoroughly frightened by a sudden night attack on his camp, ordered a retreat, which soon became a rout. One of the queens was captured, and married to Ra-za dhie-rit.

In 1503 Doo-tie-meng Khoung, king of Ava, died after a reign of 21 years. At his death he possessed little authority beyond the country in the immediate neighbourhood of Ava. He was succeeded by his son Mahara-za thee-padee, also known as Shway-nan sheng Nara-padee. He was attacked by the sawbwa of Mo-nyeng, who took Myedoo, and the ruler of Prome declared himself independent. Meng gyee ngya, king of Toungoo and the ruler of Prome, having combined to assist some fugitive nobles of Ava, they attacked Sulay in 1505, but were defeated by the sawbwa of Oon-koung, whom the Burmese monarch had summoned to his aid. The sawbwa of Mo-nyeng, having now become very powerful, made himself master of Ta-la-yeng and attacked Bha-maw, and defeated the troops the king led against him. The whole country was now in rebellion. The Mo-nyeng sawbwa placed the king of Prome on the throne, the rightful monarch flying to the north east.

The Mo-nyeng sawbwa returned to his territory, but Tha-do-meng-saw, his protégé, unable to maintain his position, retired to Prome.

Shway-nau-sheng Nara-padee returned, and was killed in 1526 during a second irruption of the Mo-nyeng Shan. The Mo-nyeng chief left his son Tho-han bwa as king of Burma.

In 1554 Sheng-hpyoo-mya-sheng, emperor of Pegu, invaded Ava by land and water,—the land column, which moved up the Sittang valley, being under his own command, and the flotilla under that of his brother, the governor of Prome.

Ava was captured, and its king See-thoo-kyaw-hteng sent to Pegu, and Sheng-hpyoo-mya-sheng's brother was made governor, with the title of Tha-do-meng-saw.

In 1610 or 1611 Maha-dham-ma-raza was declared emperor, and returned to Ava, which now became the imperial capital.

Emperor succeeded emperor in Ava, each weaker than his predecessor. Rebellions broke out among the Shan and the Talaing, and at last in 1740, when the fourth successor of Meng-gyee-gyo-goung was on the throne, the

Talaing rose in rebellion, and eventually took Ava, and carried away the reigning monarch, Khoungh-thit, to Pegu

In 1754 Aloung-bhoora, or Alompra as he is better known, arose, and drove the Peguans out of Ava

This king removed the capital to Mout-zobo

In 1764 Myay-htoo-meng ascended the throne, and Ava was again occupied as the capital of the kingdom

In 1781 king Bho-daw bhoora removed the capital to Amarapoora, impelled thereto by the persuasions of his astrologers

In 1822 Ava was once more occupied as the capital

In 1837 Ava was finally abandoned, and the capital fixed at Amarapoora, where it remained for some years

The district of Ava extends along the river for twelve miles and has a depth inland of about six It contains 320 villages — (*Crawford*)

Two Burmese explorers, who were sent up the river in 1880, give the following account of the city as it is at present

The city of Ava is said to contain 60,000 inhabitants On the west

Sin gone redoubt. is the Sin gone fort It is a square of 250 feet

It is surrounded by a ditch revetted with masonry, 18 feet deep and 25 wide The only gate is on the eastern side, and is protected by a drawbridge The ramparts are 12 feet high and 15 broad The terreplein is 15 feet, and there is a parapet wall on the inside Beneath this are magazines There were only 55 men in the redoubt at the time the explorers were there, and the only arms 55 muskets and a small supply of ammunition Each man had a pony The garrison live with their wives within the outer ramparts on the east side next the gate in small huts of bamboo and thatch The ditch contains no water during the months of December and January

North of the redoubt the earth slopes down to the Irrawaddy, distant about 80 paces

About 500 paces west of the fort lies a village called Let-koke-pin On the south there is a level plain one mile in extent, which is planted with rice, peas, maize, and between the fort and the village, south of some trees and bushes, there lies a plain interspersed occasionally with a tree or palm

The fort stands on the site of a trap used since the time of king Bho-daw, into which all captured wild elephants were turned and sported with King Min dono converted this trap into a fort

East of the fort and as far as the river Myit-ngay the bank of the Irrawaddy is lined with a wall of earthwork There are five gates in this. At each gate there are two parapeted bastions, one each side, and there are four bastions, one at each angle

The plan shows four walls in advancing echelon from the left 80 feet distant, having the left flank protected by a wall extending at right angles to the rear as far as the wall immediately in rear The first gate from the fort is between the extremity of the first wall and the flanking wall of the second The second gate is in the middle of the third wall, which is twice as long as the other two, the third gate between the extremity of the third wall and the ditch of the palace, and the fourth and fifth gates in the fourth wall The wall has a slope 12 feet high on the outside, which men can run up, a breadth on the top of 12 feet, a terreplein of 4 feet lined with brick with a parapet 4 feet high, and an interior slope up which men can run There seems to be no ditch and no traverses to protect the gates. At the gates

there are flights of steps, one on each side, to get on to the bastions and walls. The section D C shows the first part of the wall from the fort as far as the first gate. From thence to the eastern extremity is more difficult, as will be seen from the section E F in plan of city.

Cannon cannot be used from these ramparts.

The corner defences seem to be hollow bastions, with a terreplein 8 feet wide.

Near the eastern corner of the city there is a spot coloured red on the map, the height of which is on a level with the outer brick wall. It is constructed of brick and is exceedingly strong. On the top is a brick monastery, and there are also wooden ones. The former is 50 feet high. These monasteries would shelter some 1,000 troops comfortably. South of these monasteries about 500 feet distant is a village consisting of many houses, among which is the atween-woon, the secretary, the inspector of police, also the telegraph station and the bazaar. Within the city is a space surrounded by a ditch. This spot is the site of the palace inhabited in former times by king Bho-daw and king Aloung-paya. West of the city there are two bridges of masonry over the ditch. From these bridges to the Sin gone fort is 850 paces. The village near the city is called San-ya. South of the village, following the road along the ditch, one comes to a road south of the Tada-oo bazaar, which leads to the Shan states. When the city is taken the forts of Sagaing and Tha-bya-dan could be shelled from it — (*Native information, 1879*).

The Tha-bya-dan fort is situated on an island in the Irrawaddy whose bank is 100 to 150 paces distant from Ava. Steamers have to pass within 150 to 200 feet of it close along the bank. The construction of the fort is thus described: "The lowest layer consists of a platform of masonry 3 feet deep. On the north and west sides there are four thicknesses, including brick magazines. On the south and east sides there are three thicknesses, including the brick foundation and brick magazines. The outer brick foundation is 3 feet high. Then comes a level 4 feet broad. Then comes the rampart with a height of 10 feet and a sloping breadth of 20 feet. Then follows a level 25 feet wide 4 feet below the rampart, and lined with brick (*fausse bray*). Then another rampart 20 feet high with a sloping breadth of 20 feet, and a depression on its inner face of four feet, lined with brick. Then a level of 20 feet wide over magazines (terreplein) and a parapet 4 feet high along the inner edge of these magazines, and then the body of the works 155 feet. There are four entrances to the magazines, one on each side.

"On the east side is a gate and a sally-port leading into the *fausse bray*. There are also steps near the gate and sally-port by which to mount the ramparts. Over the eastern gate there is a flying bridge for the convenience of the garrison. Fifty feet in front of the eastern gate is a traverse of earth and brickwork. It is 80 feet long, 50 broad, and 18 high, and 5 feet wide at the top. Close to the south of the fort are ranges of stables for the accommodation of the ponies of the garrison. There are three ranges, each being 50 feet long and 10 broad. As to the accommodation of the garrison, there are small bamboo and thatch huts built next the fort on the south and east sides." The garrison is relieved every three months by men from Mandalay. South of the fort is the village of Tha-bya-dan, consisting of about 15 houses. South of the village is a 'kaing' jungle, about $2\frac{1}{2}$ miles in extent, interspersed here and there with trees. West of the fort bean and maize fields extend as far as the mouth of the Myit-ngay. East of the fort

2,000 paces distant is the hill of Shway-gyet-yit. It commands the fort of Tha-bya-dan.

As late as July 1881 there were no guns in position, either at Ava, Tha-bya-dan, or Sagaing. The redoubt of Tha-bya-dan was designed by Frindrich, and that of Ava by a French military officer named Vassion. It is said the Burmans consider the Ava redoubt the only one which could be defended against European troops.

When Captain Barker passed the Ava fort in 1879, there were no guns mounted on the ramparts. The Military Correspondent of the *Rangoon Gazette* of the 21st June says that the redoubt of Ava is the only defence which would merit attention if the Burmans had artillery to put into it.

The walls of Ava bear a striking resemblance to the Mandalay embankment. They are more revetted, and have a more permanent appearance, but they are much too extensive to be formidable. They could be easily crossed in most places, and the footpaths which cross them in many places show the gates are not exclusively used as a means of passing this obstacle. When passing the Ava fort last January I saw a Burman lead his pony up the embankment in rear of it (*D M, 1882*).

AVON—

A village of Misp tribe of Singphos.

AYAT GAONG—

An inferior police officer in charge of an ayat, or ward of a town (myo).

AYENG DAMA—

A village of 20 or 25 houses on the bank of the Irrawaddy.

The inhabitants are chiefly Shan kadoos and kachins. The former pay tribute to Burma, the latter to no one.

This place was once a populous city, and was named after a king who lived here. It was of considerable importance until the reign of Alompra.

An important trade used to be carried on with China, and the land was extensively cultivated. At present large tracts of paddy land lie fallow. From Ayeng dama upwards on every sandbank that is formed the people wash for gold with great success. The river here is described as 2,000 paces wide. The eastern bank is 18 feet above water.

B

BA-DOUNG—

A town on the Chin-dwin.

BA LEK—

A town on the Chin-dwin.

BAM-BOOM—

A village on the Salween river.

BAM-PAN—

A village, small bazaar.

BAN-HOAT—

"A large village, containing perhaps 150 houses, situated on the western bank of May-ting, a river of considerable size. It has a weak ruined stockade. There are other villages in the plain"—(*Richardson*).

BAN-HOAT—

Village.

BAN-KAP—

The valley in which Ban-kap is situated is nearly all under cultivation. It contains some 20 villages of from 15 to 30 houses each. The houses are

far superior to those in Kiang-tung. There are a good many artificial fish tanks. There is a road from this to Maing-noung running over hills which are not high

BANONG—

"A village of 25 houses on the right bank of the Salween, which marks the frontier between Siam and Karennee. The river is here crossed in boats. Provisions scarce"—(*Richardson*)

BAN-PAIN—

A village on the Salween river

BAN-PA-KHAN—

"A village on the route from Kiang tung to Kiang-hung of about 50 houses, with some fields in the vicinity, but destitute of trees. It is said no water can be found for miles after commencing the ascent of the hills"—(*McLeod*)

BAN-PA-KHAN—

Village

BAN-PÉ—

A large village in the Thien nee district

BÁN-PON—

Shan village in the Lay dea-myo district

BAN-SA-TO—

Village

BAN-SHAN—

Shan town in the Lay dea-myo district

BAN-SIN—

"Is the second largest town in the Maing-noung district. Here there is a large bazaar. Three main roads meet here, from Maing-kaing, Maing noung, and Lay dea-myo. Cultivation all about most extensive, and villages numerous. Encamping ground is near the bazaar"—(*Watson and Fedden*)

BAN-SIN—

Shan town in the Thien-nee district

BAN TAPIN—

A village on the route from Kiang tung to Kiang-hung, consisting of three Lawa houses. There are three or four small Lawa villages in the neighbourhood

BAN TA-PIN—

Village

BAN-WOOT—

A small Shan town in the Lay dea myo district

BAN-ZAY—

Shan town in the Thien-nee district

BAT-GYIH—

A village under the chief of Nga

BAW-GYEE—

A village of about 70 houses

BAW-NEN—

Shan district

BAW-ZAIN—

Shan district

BFT-KA-LAN—

Village under chief of Wain maw

BET-KENG—

Village under chief of Mai -maw

BGHAI—

A hill tribe east of Toungoo (see *Bray*)

BHAGON—

A village in the district of Kachin

BHAMAW, OR BHAMO—

Bhamaw is situated on the left bank of the Irrawaddy in about 24° 20' N lat. It is about 500 miles from the sea in a direct line, 800 by river. It lies in a great bend of the river about half way between the two great defiles, the lower of which may be called the Bhamaw defile, the upper the Tsenbo. At Bhamaw the river is a mile and a half wide in floods, but it is broken up into three channels by islands.

"Bhamo, known by the Chinese as 'Tsing gai,' and in Pali called 'Tsin ting,' is a narrow town about one mile long occupying a high prominence on the left bank of the Irrawaddy. Instead of walls, there is a stockade about nine feet high, consisting of split trees driven side by side into the ground and strengthened with cross-beams above and below. This paling is further defended on the outside by a forest of bamboo stakes fixed in the ground and projecting at an acute angle. However formidable to bare footed natives, the stockade does not always exclude tigers, which pay occasional visits, and during our stay killed a woman as she sat with her companions. There are four gates, one at either end and two on the eastern side, which are closed immediately after sunset. A guard is stationed at the northern and southern gates, while several look-out huts, perched at intervals on the stockade, are manned when an attack of the Kachins is expected. The population numbers about 2,500 souls occupying about five hundred houses, which form three principal streets. There are many thickly wooded by-paths and bridges over a swamp in the centre of the town leading to scattered houses, dilapidated pagodas, *zayats*, and monasteries.

"The street following the course of the bank, with high flights of steps ascending from the river, has a row of houses on either side, with a row of teak planks laid in the middle to afford dry footing during the rains. The houses of the central portion are all small one-storied cottages built of sundried bricks with tiled concave roofs, with deep projecting eaves"—(*Anderson, 1875*)

"The land on which Bhamo stands is moderately high, and the approaches to the town are also well raised, but 2 or 3 miles below the town the land is low, but still high enough in the dry weather"—(*Strover*)

A land route exists from Bhamo to Mandalay, a portion of which route lies along the right bank of the river. The part between Mandalay and Madeya is very bad in dry weather and quite impassable in the rains.

BO-GALE THAT—

A village of the Singoo district

BOM-MOO GOON—

A very small village on the road from Myin-gyan to Yemay-then, 52 miles from the former place. There is a small stream close to the south entrance of this village.

BON-TON-MA—

Village under chief of Nan-lon

BOOM—

Village of the Mimp tribe of Singphos

BOOM-MA—

Village of the Lapse tribe of Singphos

BRAY, or BGHAI—

One of the three great Karen families occupying the whole country between the Sittang and Salween, north of the latitude of the Thouk-re-khat stream as far as the Shan state of Mobyay beyond British territory. The family comprises the following subdivisions—Red Karen, Tunic Bghai or Tghai-ka-ten, Pant Bghai or Bghai la-ha, Lay-may or Brek, or Pray, Tshawko and Manoo-manaw,—some wearing tunics and some trousers, the women all wearing the ordinary Karen female dress.

In this family marriages are always contracted between relations, third cousins being considered as too remote and first cousins as too near. Beyond third cousins marriages are prohibited.

BYOO-KAN—

A village consisting of 60 small houses. It is $4\frac{1}{2}$ miles north of Taga-dag. Two streams have to be crossed in reaching this village from the south. The water was breast-high in September. South of the village is a large tank, Kunias-kan-daw, or royal tank. In this wheat is grown in the cold season. Population about 300.

This is the only village in the neighbourhood that has rice shops.

C**CATTLE—**

The chief cattle breeding grounds of Upper Burma are situated about Myin-gyan and the country lying between it and Yemay-then and north as far as Ava. Large herds of cattle are reared about Yemay-then, and great numbers are brought into British Burma every year. In the Toungoo district alone 10 000 head were imported across the frontier.

CHALAIN-MEW—

Town

CHAMPA-NAGARA—

Sampenago is the Burmese form of a Pali name. Champa-nagara, from nagara, town, and champa, the seat of a powerful kingdom flourishing in the era of Gaudama, the ruins of which are still visible near Bhagulpore on the Ganges. Sampenago, then, means the 'city of Champa.'

CHAN-TSAI—

"A town on the route from Shway-gyee to Mandalay and Western Karennee and the Shan plateau, is one of considerable size, with a large river flowing through its centre. This place and the surrounding district is supposed to be one of the best cultivated and most flourishing there is in Burma proper."—(Scone)

CHE-DO-GAN—

A village on the road from Yemay-then to Nyin-gyan.

CHIN-DWIN, or KYEN-DWEN, or NING-THEE, RIVER—

The Chin-dwin, or Ning thee, river rises in the Shway doung-gyee range north of Mogoung and thence passes north-ward, north-eastward, and westward through the plain of Payen-dwen, or Hookong—already a broad and navigable river. After leaving the plain it curves to the south, and keeps its southern course till terminating in the Irrawaddy. The extreme outlets of the Chin-dwin are 22 miles apart, the interval forming a succession of long, low and partially populated islands.

The lowest mouth of the Chin-dwin is traditionally said to have been an artificial channel, cut by one of the kings of Pagan, and which had been choked up for many centuries till a flood opened it out in 1824

Of the middle course of the Chin-dwin, between the valley of the amber mines in lat 26°30' and the Burmese fort of Kendat, little is known. The navigation is interrupted at several places by falls or transverse reefs, a series of which is known to exist some 16 miles below the plain of Hookong, and another at the village of Kaksá. Here there is said to be a fall, which, obstructing the navigation of large boats, renders it necessary to remove their cargoes to a spot above the rocks, where they are transferred to canoes, and are by them conveyed to the several Kaboo and Khamptee villages on the banks of the river in the upper part of its course. The principal village of this part of the Ning-thee is five days' journey by water north of Kaksá. This village is described by the few natives who have visited it as the residence of a Khamptee rajah, a Shan by birth, and the emporium of a considerable trade,—rice, tobacco, fish, salt, sugar and Burmese cloth,—with the people of the surrounding country. The river is here fordable, the water not being more than waist-deep.

One reach below the village of Kaksá the volume of the Ning thee is nearly doubled by the contributions of the Ooroo river, a branch of the Ning thee, which flows from the Noa-gee-ree hills through a fertile and well cultivated valley. Its banks are occupied by an active and numerous people, who trade extensively in grain, teak timber, and sapan wood, and who are annually visited by Chinese merchants for the purpose of purchasing blocks of serpentine which are found in the bed at the sources of the Ooroo —(*Pen bertun and Yule*)

Numerous small streams, all of which flow from different parts of the Noa-gee-ree hills, fall into the Ooroo, and are principally useful for floating down the timber which grows on their banks.

From Kaksá to Kendat the banks of the Ning thee are well inhabited. The villages are almost all built close to the edge of the stream, and their cultivation occupies the level plots extending from the bank to the foot of the heights in the rear.

These valleys, which are remarkable for the abundant crops of rice obtained from them, owe their fertility to the Ning thee, the inundations of which frequently flood them to a depth of three or four feet, when all communication, even between villages on the same side of the river, is carried on by boats.

There are generally two floods during the rains, one of which takes place in May or June, and the other in August. The inundations before alluded to are occasioned by these sudden floods, which are generally succeeded by as rapid a subsidence of the waters.

Three miles above Kendat is the post of Kignao, which was formerly a Manipur thana.

Chief towns on the Ning thee. The principal towns between Kendat and the mouth of the Ning thee are—

Matsung myo

Mengai myo.

Magandan myo (in Yule's Map, Monk-kadan myo)
Kunnee-myó.

Ameng (or) Amyen myo.

Almost every stream that flows into the Ning-thee from the east, from the

Auriferous streams. Ooroo to Kunnee-myo, is in a greater or less degree auriferous. The rivers from which the dust is principally obtained are the Ooroo, the Moo-thee, Khodoung Choung, the Choung ma gye, also at Kunnee. From this latter place an ore of platinum is also found.

From Kunnee-myo to the confluence of the Ning-thee with the Irrawaddy, the whole country is thickly studded with villages, monasteries, and temples surrounded by groves of cocoanut and palmyra trees,* and possessing large herds of very superior cattle. The village of Oungbon-Choung† is situated at the point of confluence of the two rivers on the left bank of the Chin-dwin, and opposite to it on the right bank is a solitary pagoda on an extensive plain, without a tree near it.

From the mouth of the Ning thee to Kendat, Lieutenant McLeod estimates the population inhabiting its banks at 80 000 souls. Population on banks of the Ning thee between Irrawaddy and Kendat. The distance between these points is 225 miles, and if we assume the depth occupied on each bank at one mile, we shall have an area of 450 square miles for the population, or an average of 133½ inhabitants to the square mile. This seems an improbable number. The Burmans give the number of houses at 9,480, and allowing 5 inhabitants to each, we should have only 47,400.

From Kendat north to the sources of the river the population may be estimated at 24,000, which gives a total of 71,000 inhabitants on the banks of this river.

The Ning thee river from Monfoo to Sanayachil ghat varies from 600 to 1,500 yards in breadth, and the only ford known to exist is one a little below the mouth of the

Ning thee river Maglang, and we only know of this from native information. From Sanayachil ghat to Irrawaddy by the Ning thee and Ava by river 300 miles. The distance is 300 miles.

Across country by the route traversed by Dr Richardson 221 miles, of which the first portion from Guuda to Monkhadan-myo is 72 miles, and the road impassable for all sorts of carriage, the latter 149 miles through a

From Sanayachil ghat to Ava by land 221 miles highly cultivated and fertile country.

When Alompra invaded Manipur in 1758, his army advanced by this route, and crossing the Ungoching range by the Kendat-Sanayachil route, passed by the Tummo Morai-Imole line into Manipur.

In 1819 the Burmans advanced from Ava by Mout-zobo, Myedu, Kendat, Tummo, Morai. It is most probable that in any future operations against Manipur the same routes will be followed.

CHIN-MYIT-CHIN—

A village 1½ miles north west of Koke-keh, and consisting of 15 huts. Population 75. There is only a footpath between these two places.

CHOE DONG—

A village of Mimp tribe.

CHOKTEP—

Stockaded village.

CHOUK-CHAN—

A village of about 50 houses on the road from Myin-gyan to Nyin-gyan, 24½ miles distant from the former place. The water-supply here is bad.

* Pemberton, 127

† Not marked in Yule's map.

CHOUK-PONE—

A small village of 20 miserable looking houses on the road from Myn-
gyan to Nyn-gyan. It is about 30½ miles distant from the former place.

A little to the west of this village, in the valley, are a few more houses,
which probably belong to it.

CHOUNG-BOUK—

A village one mile from Pyaw-bweh-ywa-thit. It is situated near a stream
of the same name, the current is strong, but it is fordable. The inhabit-
ants number about 800. There is a cart road from Pyaw-bweh-ywa-thit
and this village.

CHOUNG-TOUNG—

A village a quarter mile north-east of Myn-gyan. Population about 500.
Just before reaching this village a stream must be crossed. It is breast-deep
in August and September. This village is on the road between Myn gyan
and Mandalay.

CHOU-WA—

A village of In-ting tribe of Singphoos.

CHOW-CHOUNG—

An island on the Irrawaddy, lat 23° 24', long 96°.

CHOW-NEE-YWA—

A village on the road from Myn gyan to Nyn gyan, about 15 miles from
the former. There is much cultivation about.

CHUN NING FU—

A town of Yunnan.

CHYOUK-TAT—

Is in lat (estimated) 20° 50'. Is a large town, or rather overgrown
village, and one of the most populous in the states. Here there are some
smelting works of argentiferous galena that occurs in the limestones and
calcareous deposits of this district, but it was impossible to ascertain from
the natives the precise localities where it was got. The ore is purchased by
the smelter at the rate of two to three and a half ticals of silver (haw) per
basket (about a bushel), uncleaned, often containing a good deal of rubbish
apparently. It must be rich, however in silver, or this metal could not be
extracted by the simple and rude method practised.

The larger lumps being broken up, the ore is first put into a small cupola
or blast furnace, together with charcoal and a proportion of broken slag.
These cupolas are of clay and built upon the ground 2½ or 3 feet in
height and 1½ to 16 inches in diameter. Women are employed standing
on raised platforms to pump the blast—generally two to each furnace. As
the sulphur is driven off, the reduced metal accumulates at the bottom of
the furnace, and is lalled or rather scraped out from below (the scoriae
being removed) into moulds in the ground, where it assumes the form of
massive lenticular ingots. When cool and set, these ingots are removed to
the refining shed, and placed into small reverberatory furnaces with the fuel,—
large pieces of charcoal supported on fireclay-bars,—above the metal,
which is thus kept in a fused state for about 24 hours. During this time as
the lead becomes oxidized, it is removed by gently revolving over the sur-
face an iron rod, around which the lead in the form of litharge solidifies,
and as this process is continued, it accumulates in a number of coatings or
layers one upon the other. When all the lead has been thus removed, the
silver residue is taken out as a button or plate on an iron ladle. The rollers
of litharge have of course to be again reduced, in order to convert them
into metallic lead, and there must be a considerable loss of the metal during
this as well as the former process.

The plate of silver obtained is considered pure, and is not used in this state as currency, but is sold to the silversmiths and jewellers, who alloy it with copper and lead, in various proportions

CLIMATE—

Upper Burma may be divided into two zones,—the dry and the damp. The former commences at about Magway, and extends up to and beyond Mandalay for some 50 miles. These zones are indicated in the hyetographical map by arrows,—that portion contained within the blunt arrows being the dry zone, the barbed arrows indicating the damp zone.

The former is open level and slightly elevated tableland, which gradually rises from the Irrawaddy till it attains a height of 400 feet at Yemaythen, distant 70 miles east of the river and of 550 feet at Hline-det, which is the same distance from the river. These elevations are above the river in the same latitude, this represents a gradual rise of 1 in 924. About Pagan the country is intensely dry, and at times the yearly rainfall is less than 10 inches. From Pagan to Hline det and Yemay then, and from Hline-det to Ava, the climate is almost as dry, and the want of water is severely felt by travellers in the dry season. This is especially the case on the road from Hline det to Ava. The water is so scarce along this route, that it is not possible to send elephants or any number of animals by it, and although the road appears to be good, it is almost useless, and the alternative route by the hills through the Nattik pass is invariably followed by the employés of the timber merchants when taking elephants to and from the Nyn gyan forest. Above Sampenago the change of climate is apparent from the altered vegetation of the country. On both banks are seen dense forests, and this continues up to the Chinese frontier beyond Blamaw.

The country enclosed in this zone is partly rich cultivable lands, and partly gravelly and barren. There is no thick or high jungle here, and on the barren parts there are only a few bushes. It is most probable that a constant supply of water could be got by sinking sufficiently deep wells, as the Shan mountains are only a few miles distant to the east.

D

DAG-WIN-ZEIK—

A village on the Salween river

DA-HAT-TAW—

A village on the left bank of the Irrawaddy, lat 21° 20', long 95° 18'. It has a good camping ground, and the water-supply is good.

DAPHA-BOOM—

Mountain

DARAP-KHA—

Laes at the foot of the Naga hills, nearly opposite Beesala.

DARAP-PANCE—

Is a considerable stream with precipitous banks, but is fordable at the heads of the rapids. Fish, especially a large kind of barbel, abound.

DEE-BAY—

A range to the right of Momen

DIBONG—

Captain Bedford's account of his voyage up the Dibong, which follows, is the only one we have of that river, I give the extracts from it as published in the Appendix to Wilson's *History of the Burmese War*—

"On the 4th of December Captain Bedford entered the mouth of the Dibong. The water was beautifully clear, running in a bottom of sand and stones. On the 5th a shallow, or bar, was crossed, above which the stream was much obstructed by the trunks of trees brought down by the current. The river continued deep, and although several rapids were encountered, they were passed without much trouble. Numerous traces of buffaloes, deer, and leopards were observed, and also of elephants, which last had not been seen along the Dibong, nor on one of its feeders, the Lalee. Amongst the trees on the banks were several of which the wood is serviceable in the construction of houses and boats, as the san and soleana. The demeru yields a bark which is eaten by Assamese with pán.

"On the 8th at 11 A.M. the most formidable rapid that had been met with was passed with much difficulty, and on the following day a shallow extending across the river, over which the boats were forced."

DOH—

Stockaded village

DWOM-TULWEE—

A village

E**EE-DEE—**

A village in Main khwon district

EN-BEN-BO—

A large village on the road between Pway-hla and Mandalay

ENG—

A village in the district of Mya-doung In 1837—20 houses

ENG-DAN-GYEE-SHEIT—

A village in the district of Mo-nyeng In 1837—15 houses

ENG-DAW-GYEE—

District

ENG-DAW-GYEE—

A village in Eng-daw-gyee district

ENG-KHWON—

A village on the bank of the upper part of the Irrawaddy

ENG-MA—

A village in Singoo district In 1837—25 houses

ENG-NGWON—

A village in the district of Mogoung

ENG-TOUNG—

A village situated on the left bank of the Irrawaddy There were 12 houses —(*Bayfield*)

ENTA-MHWOT—

A village in the district of Mya-doung In 1837—20 houses

ESMOK—

A town in the Shwayh district of Yunnan

Q

GA-LON—

A village in Ka-tha district In 1837—50 houses

GAN-DOUNG—

A village of 30 houses on the road from Myin-gyan to Yemay-then, and 67 miles from the former place The soil about here is laterite

GNA-NAU—

A town on Meza-Shwayh river

GNAUN-MUN—

A town of Mrelap Shan, east of Ava.

GNA-ZOON—

A village on the Irrawaddy

GNOE-DOON—

A town, one of the most important in Karennee It contains 400 or 500 houses, is surrounded by a stockade, surmounting a mud wall and surrounded by cultivation — (*Richardson*)

GNOUN-RAM—

A town south of Ava

GNOUN-RUE—

A town of Mrelap Shan

GROUN-OUN—

A town

GWA-WINE—

A stream in Yemay-then

GWAY-GONE—

A village $3\frac{1}{2}$ miles north-east of Ywa-thit, containing about 50 huts Cart road between the two places pretty good Population about 250

GWAY-GYOUNG—

River and village

GYO-BENG—

A village in Singoo district In 1837—40 houses

GYOK—

A village in Mo ngyeng district In 1837—8 houses

GYOKE-BIN—

A village 2 miles north-east of Tanoung-daung Pyaw-bweh It is situated on high ground near the river, and is estimated to contain about 800 inhabitants Jaggery is manufactured here Water-supply from wells — (*Native information, 1881*)

H

HAL-TAY—

A village on the route from Kiang-tung to Kiang-hai of 10 houses, close to the Me-hem stream

HAW-KA—

A village on the right bank of the Upper Irrawaddy Near this are fine forests of teak and other useful timber The inhabitants are chiefly Kadoos

HAWSHUENSHAN—

A walled Chinese town, built on the slope of the hill, situated in the valley of Hawshuenshan, and about two miles from Momien

Hawshuenshan had evidently been a place of great importance, being a much larger town than Shway-duay, and must have contained at least 3,000 inhabitants

"The people of Hawshuenshan had declared against the Panthays, and joined the Chinese partisan Law-guang-fang. On this they had been attacked and defeated. As usual, no quarter was given, and all who failed to fly were massacred and afterwards buried where they fell. A fine temple overlooked a small stream running down from Shway-duay, and which now formed a small lake just outside the town. This water was crossed by a handsome stone bridge, with picturesque archways. From this we followed a raised causeway to the head of the valley, and, passing the Tabô waterfall on the left, ascended gradually 400 feet to Momien. This vale of Hawshuenshan, though not more than two miles long by one broad, had been once encircled by large villages, the ruins of which still attested that before the war they must have been places of no little wealth."

—(*Anderson, 1868*)

HAY-PECK—

A small hill which consists of two or three small villages on a rising ground, nearly bare of trees

HELEN—

A town south of Mout-zobo

HENTHA—

A village

HLINE-DET-MYO—

This town lies to the south of Pen-the lee, and about 30 miles north of Yemay-then. It is five or six days' journey from the Irrawaddy. The road down to the river passes in a north-west direction to the town of Myin-gyan, about 16 miles north of Pagan. The first part of this road is across the flat alluvial plain. The Sam moun-g-choung is met about two miles from the town (Hline-det). It is a shallow bedded stream, and dry during the hot season, it drains from the south, and is said to join the "Myit" or "Pan-loung." When about ten miles from Hline-det, the road passes over a very slight rise of sandy ground, and eight miles further it leaves the plain and proceeds on through a gently undulating tract of country of sand, gravels, and the outcrops of thinly bedded rock at low angles of inclination, and a soft or incoherent sandstone with large nodular concretions. Fossil wood also occurs sparingly in a more recent deposit. After passing the watershed, a low anticlinal in this ground, an extensive view is obtained to the westward, and the lofty hill of Puppa now makes its appearance a long way off to the west-south-west. Many large villages and towns are seen, and the road on the descent towards the river passes through several, all of which are well fenced round, and the compounds and roads hedged in with cut thornbushes and briars. Within the large villages there is generally an open space for bazaar carts, &c. —(*Watson, 1864-65*)

The plain of Hline-det is about 800 feet above the level of the sea —(*Watson, 1864-65*)

HLWOT-DAW—

High court and council of the monarchy

HNOTE-CHO—

An island on the Upper Irrawaddy. There is a large village on it inhabited by Shan Kadoos. The country on the banks along here is a fine plain, parts of which were once cultivated. At this village limes are very plentiful.

The people carry on 'kaing' cultivation on the banks of the river and have gardens. The breadth of the river here is over a mile

HOETONE—

A village

HONAM—

A village Is in lat. (estimated) 22° 25' N, long 100° 125' E

HOOKONG—

"The valley of Hookong or Payendwen," says Captain Hannay, "is an extensive plain, bounded on all sides by hills, its extent from east to north-west being at least 50 miles, and varying in breadth from 45 to 15 miles, the broadest part being to the east. The hills bounding the valley to the east are a continuation of the Shway-doung-gyee range, which is high, commences at Mogoung, and seems to run in a direction of N 15° E." The principal river of the valley is the Numtunae, or Chin-dwin, which flows from the Shway-doung-gyee range, and after receiving the contributions of numerous small streams quits the valley at its north-western corner and again enters the defiles of the hills, beyond which its course is no longer perceptible. On the western side of the valley there are but few villages, and these thinly inhabited, the capital itself containing not more than 30 houses, but the north and eastern sides are said to be very populous, the houses in those quarters being estimated at not less than 3,000, nearly all of which are situated on the banks of the Towang and Debee rivers. All the low hills stretching from the western foot of the Shway-doung-gyee range were under cultivation, and the population is said to extend across to the banks of the Irrawaddy in numbers sufficient to enable the Singphos, when necessary, to assemble a force of nine or ten thousand men.

"With the exception," says Captain Hannay, "of the village of Mein-khwon, which has a Shan population, the whole of the inhabitants of the valley are Singphos and their Assamese slaves. Of the former, the larger proportion is composed of the Mirip and Tisan tribes, with a few of the Lapae clan, who are still regarded as strangers by the more ancient colonists, and can hardly be viewed but with hostile feelings, as this tribe has frequently ravaged Mein khwon within the last six years, and was guilty of the still greater atrocity of burning a priest alive in his kyong, or monastery.

"Formerly the population was entirely Shan, and previous to the invasions of Assam by the Burmans, the town of Mein-khwon contained 1,500 houses, and was governed by the chief of Mogoung. From that period the exactions of the Burmese officers have led to extensive emigration, and to avoid the oppression to which they were hourly exposed, the Shans have sought an asylum in the remote glens and valleys on the banks of the Chin-dwin, and the Singphos among the recesses of the mountains at the eastern extremity of the valley. This state of affairs has led to general anarchy, and feuds are constantly arising between the different tribes, which the quarrel of the Biss and Duphea Gams has greatly contributed to exasperate. No circumstance is more likely to check these feuds and reclaim the scattered population of the valley than the establishment of a profitable commercial intercourse with the more equitably governed valley of Assam, with which communication is now becoming more intimate than at any previous period."

In its relation to Assam and China, the trade of the Hookong valley naturally attracted a share of Captain Hannay's attention, and from his account it appears that "the

Trade.

only traffic of any consequence carried on in this valley is with the amber, which the Singphos sell to a few Chinese, Chinese Shans, and Chinese Singphos, who find their way here annually. The price of the common or mixed amber is $2\frac{1}{2}$ ticals a viss, or Rs 4 per one and a half seers, but the best kind, and what is fit for ornaments, is expensive, varying in price according to its colour and transparency."

Of the several routes by which communication is kept up between the inhabitants of Hookong and the countries around, the principal appear to be one leading across the Shway-donng gyee range to the eastern Singphos. A second, called the Lyegnepbbum road, winds round the base of the mountain of that name, and leads in sixteen days to Mung-lung, the capital of the Khamptee country, which was visited by Captain Wilcox.

The most important one, however, with reference to trade lies in a south-east direction from the Hookong valley, from which the district of Kako Wain-maw is not more than eight days' march distant. By this route the Chinese frequently travel, and it affords a very satisfactory proof that intercourse may be held direct with China without the necessity of following the circuitous route by Mogoung.

The Meeross, who inhabit the mountain range between the Hookong valley and the Irrawaddy, told Mr Jenkins in 1869 that there were several passes of great elevation through this range.

The same traveller was also informed by people who traded between the valley and the Pansee country that one of the routes they used struck the Irrawaddy at Mainlah, a large Shan village, which is situated on the left bank of the Phoong may at its confluence with the Irrawaddy. This river is in lat 26° , about 130 miles above Bhamo. They said that a man carrying a load could reach the nearest Pansee villages from Mainlah in two days' march.

The Chinese used formerly to come down the Phoong-may in great numbers, and cross to Hookong for jade and amber, but the Panthay war stopped this, and while it lasted only the Mahomedans of Yunnan came by this route.

The route across the Patkoi range by the Now yang lake was first brought to notice by Captain Charlton in 1834, who writes "What a pity there is no means of communication between Suda and Yunnan. A good land road—and there are no natural obstacles of any importance to prevent it—would afford an outlet for British merchandise into the very heart of China." As the Singphos of Hookong trade with Yunnan and with Assam, it cannot be disputed that Captain Charlton was right in asserting that no physical obstacle exists to prevent a thoroughfare from being established the whole way.

It has been urged that the Singphos are so poor and so simple in their habits, that they do not want better communication with other countries, because they could reap no benefit from it. It is true that their wants are few, but some of these are ill supplied, as in the case of salt for instance, which is very bad in quality and very dear throughout Hookong. Besides, the bulk of the population engage in some kind of barter when not occupied in cultivating, and a people of this kind would not be likely to oppose the opening of a road, as they are capable of seeing that the measure would prove to their advantage.

It must, however, be admitted that some difficulty lies in the fact that nearly all their Gams are large slave-owners, and suffer heavily and constantly from the escape of their slaves across the border into British territory. All the chiefs feel a great deal of irritation against us, on account of the extreme abolitionist policy that has been adopted of late years, and it would be necessary to indemnify them for the loss of their slaves if we refuse to return those who claim our protection — (*Jenkins, 1869-70*)

The only difficulties to be encountered on the road between Assam and Hookong by the Nam-roop route are caused by the denseness of the jungle. The intervening country is a wilderness, consisting of a forest of many useful trees of immense size. Below the larger trees is a tangled mass of smaller plants, most of them climbers. The only paths by which man can move are the beds of rivers or mountain streams. It would be impossible to trace these channels but for the tracks made in the jungle by herds of wild elephants. Progress along such paths is very slow, and the distance to be travelled much increased, owing to the necessity of often following the winding of the streams.

The Burmese Government in former days established a village or military settlement every twelve or fifteen miles along the route, and it was the business of the people living at these stations to cut the jungle occasionally, and to remove fallen trees and other obstructions from the path. The route has now fallen into disuse, on account of the posts having been one by one deserted. Traders now usually travel by a more circuitous and very difficult path through the Naga hills, passing from one Naga village to another, so as to obtain supplies.

It is to be wondered at that the Nam-roop route should be used at all by traders, considering that each man must carry fifteen pounds weight of rice for his own consumption on the journey, besides his load of goods, but the Moolooks, Singphoos, and Dooanahs are not hillmen, and to avoid climbing the steep scarp which the Pathoi presents at every other point, they form depôts of provisions. Along this route they carry forward rice, and bury it at convenient distances along the road, and then return for their loads. Mr Jenkins was also informed that there was more than one well used trade route through Hookong and through the Sepahee Singphoo country to Tali and other places in Western China — (*Jenkins, 1869-70*)

The principal mineral productions of the Hookong valley are salt, gold, and amber. The former is procured on the north and south sides of the valley, and the waters of the Nam-twon kok and Edee rivers are quite brackish from the numerous salt springs in their beds. Gold is found in most of the rivers, both in grains and in pieces, the size of a large pea.

The rivers which produce it in the greatest quantity and of the best quality are the Kapdeep and the Nam-kwon. The sand of the former is not worked for gold, but large pits are dug on its banks, where the gold is found. Besides the amber which is found in the Payen toung or amber mine hills, there is another place on the east side of the valley, called Kotah Bhoon, where it exists in great quantities. The spot is considered sacred by the Singphoos, who will not allow the amber to be taken away, although it is of an inferior description. Specimens of coal were found in the beds of the Nam-bhug-co and Edee rivers by Captain Hannay,

and he learnt that in the Noom-tarang great quantities of fossil wood were procurable —(*Hannay, 1885-86*)

HOO-THAW, or WOO-SAW—

This place is three days' march north-west of Momien, and is described as a town of 1,000 houses, surrounded by a stone wall 20 feet high and defended on one side by a deep stream, and altogether stronger and more flourishing than Momien. Its position must be at a high elevation, as in winter the swamps are frozen hard enough to bear men on the ice. Communication is carried on between this place and Lay-myo, 100 miles north of Bhamo, on the Nam-tha bet, an affluent of the Irrawaddy, by which route the officers from Momien reached Bhamo.

Hoo-thaw was captured in May 1874 by the Chinese from the so-called Panthays —(*Anderson, 1875*)

HOOTOO—

A village. Is in lat (estimated) $21^{\circ} 58' 45''$. Its elevation is 2,400 feet above sea level, and about 1,300 feet above the level of the Salween.

HO-YAW—

A village.

HTEE-ZEH—

A town on the bank of the Irrawaddy.

HUE-LUK—

A small stream with very high and steep banks, close to the foot of the western range of hills.

I

INLAY—

This would be a very small place, if it were not for the Burmese troops stationed here. The stockade is a square of about 300 yards, protected on three sides by a river which divides immediately above it, and by a deep broad ditch which connects the two streams on the fourth. In the centre of the square there is an inner stockade, apparently surrounded by a ditch, and it is inside this that all the troops live. The river is about 30 yards wide.

On bazaar day numbers of people come into this place. The principal articles that are brought for sale are groundnuts, rice of a particularly small white kind much resembling the Bengal rice, only rather hard when boiled, ponies, bullocks, vegetables, earthen cooking pots, firewood (there is rather a scarcity of this article), tobacco, and cotton. Of fruits, there are plenty of oranges, plantains, limes, and lemons. The Mobyay stream is said to have no outlet.

There are three bridges across the river, all close together, in a very dilapidated condition. The river abounds in fish, which are held sacred by the people —(*Sconce*)

K

KA-CHAING-POON—

Hills near the Irrawaddy, lat $25^{\circ} 37'$, long $97^{\circ} 10'$. The Kachin sawbwa Souk-lee has his head-quarters here (1879).

KACHIN HILLS—

The Kachin mountains rise from the Bhamo plains to an elevation of from 4,000 to 7,000 feet running in a northerly and southerly direction, and nearly parallel to the bank of the river Irrawaddy. These mountains form a formidable obstacle to intercourse with the Shan states and Yunnan, and were the people who inhabit these districts disposed to be unfriendly, they could raise serious obstacles to all progress in that direction.

This range of mountains running far north and south is from 40 to 70 miles broad. The hills are richly wooded to their summits, without the dense jungle that characterises the mountainous ranges of Southern Burma. These ranges have no acute ridges, but are finely rounded, and slope gently into the valleys, which are capable of producing any kind of vegetation.

The climate is cool and salubrious, and fruits and potatoes grow in wild abundance. Peaches, apples, cherries, strawberries, and raspberries are seen scattered over the hillsides. The oak and fir are occasionally met with in the higher regions, the teak and pingoda scarce and widely apart. Numerous Kachin villages are scattered along the sides and crests and in strange out-of-the-way places, with roads leading in every direction to and from them. These paths are at all times easily distinguished, being very bad in many places, steep and nearly perpendicular in others. Yet the hardy mules that these mountaineers employ get over them with facility carrying burdens of 170 lbs, and climbing the steepest places with an agility and endurance quite surprising.—(*Bowers*)

There are three general trade routes between Bhamo and Momien and the country beyond. These are along the Sanda valley, the Hotha valley, and the Muang-wan valley, the former being the most northerly, the latter the southernmost.

These valleys are breaks at a lower elevation in directions about N E and S W in the great mountain chain which passes down the centre of Upper Burma. This itself is a continuation of the Himalayas.

High ridges separate the valleys. They are generally steepest on their northern slopes. The beds of the valleys are at different elevations. Thus the Sanda valley is about 2,000 feet above Bhamo, while the Hotha valley is about 3,800 feet, and the intervening ridge is over 5,000 feet. The Muang-wan valley is about 2,500 feet high, and the ridge between Muang-wan and Hotha varies in height from 400 feet upwards above Hotha. Several different routes reach into each of these valleys from Bhamo. Their character is decided by the nature of the intervening country, and they depend for their existence on the Kachin inhabitants of the hills, who have cut them and keep them open.

The Sanda valley is a portion of the valley of the Taping river, a branch of which, the Ta-how, flows from Momien to the Irrawaddy near Bhamo. Along this Ta-pang valley are plains at increasing elevations communicating by defiles or gorges, along which the river flows in rapids, preventing boat communication. The Sanda valley is one of these, and, except at the Taping, it is closed in on all sides by elevated ground.

The Hotha valley is drained by the Nam-ga, a tributary of the Taping, into a defile out of which it flows. The south-west end of this valley is closed by ridges at an elevation of

Hotha.

over 4,500 feet above Bhamo. It, as well as the Sands valley, can be communicated with by roads along the defiles of the Taping or over the boundary ridges.

All the routes to Momien converge at the north-east ends of these valleys before reaching Nantun some 20 miles from Momien. The elevations to be overcome on the different routes between Bhamo and Nantun have much weight in comparing their natural advantages.

The Muang-wan valley is nearly at the same level as Nantun, being only about 200 feet lower. It is approached from Bhamo and Sawaddy by several roads, which present no difficulties in the plain lands of Burma.

The roads do not always take the most favourable line of country, being rather laid out with a view to afford easy approach to the villages. The ridge is about 750 feet above the plain land of the valley, but the descent is easy. Through the valley little difficulty need be anticipated. Between Muang-wan and Nantun there is hilly and rolling ground, which is described as not difficult, but about which there is no reliable information. There are more routes than one, but that most generally used passes close to Sheema-loung, the stronghold of La-see-ha-tai, a man believed to be inimical to the opening of the trade.

The Hotha valley is at an elevation of nearly 1,100 feet above Nantun. At the head of the valley the height of the dividing ridge is about 455 feet above Hotha. Beyond the ridge only spurs could be seen, and there appears to be a great deal of hilly ground to be passed over, and another small ridge to be crossed.

Between Hotha and Bhamo Sladen's expedition followed the route known as the Ambunadas Natt. This causeway runs nearly to the north end of the valley. It is made of granite slabs 4 feet long by 12 or 14 inches by 4 to 6 inches thick. Granite bridges carry the road over smaller streams. They are very fine specimens of masonry, the stone being exceedingly hard and well worked. The arches are semi-circular, the largest span about 24 feet.

The valley averages 3 or 4 miles in width, the northern boundary hills coming down in gradual slopes which round off into gently undulating land. The plain land, where the paddy cultivation is, lies more to the south-eastern side, the river Namsa flowing through the centre of it.

The hills in this part are all of metamorphic formation, with here and there granite appearing. The rocks generally are of quartzose and micaceous schist. The surface and the ground for a considerable depth are formed of disintegrations of this, and are easily worked, occasional boulders, some of immense size, crop out, or rest on the surface. The roads are generally cut in the hillsides, and the chief one is 6 to 10 feet wide.

From Ho-tone the descent is regular, and the road easy till the Taping river is reached, where the fall is very rapid and difficult. The road descends to the Nam-tha-bet stream, which runs rapidly. It is about 120 feet wide, and is crossed on rafts.

The Sands valley communicates with Burma through the defile of the Taping, which flows over a bed strewn with immense boulders and having a great fall. A large amount of water passes down, which is represented in the upper valley by

a stream 1,000 to 1,500 feet wide and a depth of six feet, flowing at the average rate of 4 miles per hour

Dry weather roads follow each bank. That on the left bank turns into the Hotha valley through the defile of the Namsa, but it is also continued to the Sanda valley. Where the hills rise steeply from the river a large amount of cutting is required for any breadth of road, but for a road not exceeding 12 feet in width the banks of the Taping river afford the best line, as all unnecessary ascents and descents are avoided, and it gradually rises from the level of the Burmese plains to the level of the valley.

The whole valley is divided into three sawbwaships,—Muangla, Sanda, and Man-wyne, the latter being under Muang-tee

The first is the largest, having over 200 villages in it. Allowing an average of 60 houses to each village and 5 persons to each house, there will be over 60,000 people in the Muangla district. This is a moderate computation, as some of the villages are very large.

Sanda. Sanda is said to be about half as large, and may contain 30,000 people.

Allowing 10,000 for the town of Sanda and Muangla, the whole Chinese and Shan population of the valley may be estimated at 105,000.

The plain portion of the valley in which the Shans reside is about 26 miles long by an average of $4\frac{1}{2}$ wide, giving 117 square miles. This gives nearly 900 to the square mile, which may seem a large proportion, but the numbers are founded on enquiries from persons competent to give tolerably correct information, and are supported by personal observations. The population is very dense. There is a large Kachin population on the slopes of the hills and in the valley at the south end, which may be estimated at 30,000 or 40,000.

Altogether there are about 1,00,000 people in the whole valley, the watershed of which to the north extends a great distance.

There are few industrial operations carried on, except to supply the people with clothing and household wants; and as almost every house supplies itself, there is little interchange of these. Nothing is made for export. There is little money in the valley, Chinese brass cash being used and exchanged at 450 to 500 for the rupee. Gold is very scarce, all the ornaments being made of silver.

The population is mostly agricultural, rice being the staple produce, some of which is sent to China, and some to Burma. Fruits and garden vegetables are produced for home consumption, but potatoes are exported to Burma, and find their way to Mandalay.

For paddy cultivation the gently sloping ground is terraced into broad level areas bounded by earthen bunds, all of which are regularly shaped with the spade and sodded on top with grass.

It would be very easy to make an excellent road or railway through this Sanda valley. The distance from Bhamo to the south end of the valley is by road 51 miles, and This interval of 39 miles might be shortened by straightening the line. There is a rise of 250 feet in the length of the valley.

The Nantun valley and Momien valley are plains of increasing elevation connected with the Sanda valley by defiles. Momien has an elevation of 5,808 feet above the sea, or 2,140 above Nantun, and 2,870 above Muangla. This last place is 90 miles from Bhamo, Nantun 109, and Momien 142. There is, therefore, a rise of 530 feet in 19 miles between Muangla and Nantun, and 2,140 feet in 23 miles from Nantun to Momien.

This is an average of 93 feet per mile—a gradient of 1 in 57. The Ta-how valley presents natural facilities for overcoming this ascent, and Mr Gordon was of opinion that a railway could be carried the whole way. Momien appears to be near the highest part of the range between the Irrawaddy and the Salween. This line of road passing through Pon-lyne, Ponsee, and the Sanda valley is considered by the people of that part of the country as the best at present existing. The principal advantages are—first, the short distance, about 30 miles in the Kachin hills, secondly, the small amount of unnecessary elevation to be overcome in ascending the Sanda valley, and thirdly, the passing through the Sanda valley itself, whose dense and laborious population may be expected to take a large amount of any goods which may be brought by that route. The disadvantages are—first, having to cross the Taping river in Burma, and recross it in the Sanda valley, secondly the descent of 1,200 feet to the Nampoung, and reascent to Ponsee.

There are other routes to the north which reach the Sanda valley, but all have to pass over higher and broken ground, meeting the same descent to the Nampoung, and in the opinion of the people themselves not equal to the Ponsee route.

The Hotha routes have the advantage of not requiring to cross the Taping river. In other respects everything is against them, and for the purpose of making a good road on scientific principles they cannot compete for an instant with either the Ponsee or Muangla routes.

The Muang-wan routes were formerly, when the traffic was great, the favourite routes, but since the opening of the Ponsee line, faulty as it is, they have been less used.

The Muang-wan valley is much larger than the Hotha valley, but not so large as the Sanda one. The population is said to be as large as that of Muangla—some 60,000. There is no large town of Muang-wan; the village where the sawbwa resides is called by the name of the district. The ridge to be crossed before reaching the Muang-wan valley is about 750 feet above the plain land, to which a descent is again made. This is not a grave objection, if a gentle slope can be made to it. The plain land of the valley is nearly on a level with Nantun. Uncertainty exists as to the land passed over between the Muang-wan valley and Nantun. It is known that there is hilly ground, but there is said to be no great difficulty. Mr Gordon is of opinion that a good road with easy gradients can be made without great expense through either the Sanda or Muang-wan valley. No greater difficulties than are ordinarily met with in constructing hill roads exist in the Kachin hills. And there are some advantages in the dense population accustomed to make roads.

The country will compare favourably with the Arakan mountains opposite Promé, over which a 12 foot road has been made to the sea. Ninety miles of this road are in the hills. The total height to be overcome is over 3,000 feet above sea level, and the rocks are in part of the hardest material—trap and argillaceous schist.

If a road were constructed between Bhamo and Momien, the abundance of skilled labour in every part of the country with the scarcity of money ought to cause the work to be done at cheaper rates than in British Burma.

Projected road from Bhamo to Momien.

On the line of road from Bhamo to Momien there would be about 20 miles of road in the Burmese plains, 30 miles in the Kachin hills, 30 miles in the plain land of the Sanda valley, and 40 partly through plain and partly through hilly ground between Muangla and Momien. Taking half of this as hill and half as plain, there would be altogether 70 miles of plain land and 50 miles of hilly land through which the road would pass. If it were 20 feet wide in the plain land and 12 feet in the hilly land, gradients 1 in 30, its cost, completely bridged, should not be over Rs 10,000 per mile.

With regard to the question of making a railway to Momien, Mr Gordon thinks it would not be impossible. He says in his report "If the Sanda valley line be chosen, I believe the only real difficulty will be found in the ascent from the Burma plain over the Kachin hills to the Shan valley. The greater part of the remainder of the route offers unusual facilities for constructing either a road or railway. The ascents from the Sanda to the Nantun valley, and from that to the Momien, are comparatively trifling, and I have no doubt that on the Muang-wan line the rolling ground between Muang-wan and Nantun could be easily overcome. In a comparison of the Sanda and Muang-wan routes, so far as crossing the Kachin hills is concerned, I would give the preference to the latter, for here the problem is reduced to taking the line up a hill of moderate slope over a ridge 3,200 feet high and then descending 750 feet to the valley, while in the other case the Nam-poung stream, though not offering much obstacle to a common road, would cause great difficulty to a railway. In either case only such difficulties are met as are ordinarily met with in hill railways and overcome by ordinary means"—(*Gordon, 1869*)

KACHO—

A large village of 80 houses of Shan Kadoos. It was built long ago by a Shan governor called Haw-pyin. It was a very important city. It now pays tribute to Burma in the shape of a yearly present. There was formerly a good deal of trade with China, but the depredations of the Kachins have closed the road.

The people of Kacho live in great dread of the Kachins, and the houses are all shut up at 8 o'clock. Sentries being posted, every man takes his turn. This city was formerly established by a great Shan sawbwa, Haw-peing, who came from Thuen-nee city. There was a road between it and China, and there was constant traffic by means of pack animals. Three other cities were established by different Shan sawbwars,—Waing maw above Kacho, Maing-maw below it, and Maing-na. These sawbwars followed king Aloung-paya-gyee in his expedition against Siam, as generals with a contingent of 1,000 men each. One year a Burmese messenger was sent to the Burmese king with the usual gold and silver flowers, he did not deliver them, and the king, thinking they had rebelled, attacked and destroyed their cities, taking them prisoners. These cities now only contain houses as under.—

Maing maw	20 houses.	Ywadau	20 houses.
Kacho	80 "	Thayagone	20 "
Moke-lway	20 "	Thagara	30 "
Waing maw	40 "		

KAD-DOUNG—

A lofty mountain peak of the Kachin hills south of the Taping where that river flows from the range. Dr Anderson thus writes "On either side of

the river rose the two lofty peaks, the Shites-doung on the north and the Kad-doung on the south, seeming to stand like sentinels to guard the routes to China.

"The old Chinese forts and frontier custom houses occupied strong positions on either mountain, and the boundary line is almost defined by these heights"—(*Anderson*)

KAKO—

A subdivision of the Kansa Kachins.

KALAN—

A subdivision of the Maroo tribe of Kachins

KALÉ—

The district of Kalé, which forms the southern portion of Kobo, extends a short distance beyond the confluence of the Kathé Choung with the Ning-thee, to Mntoot-goundee, on the right bank of the latter river. It is said to have extended formerly nearly down to the junction of the Ning-thee and Irrawaddy rivers.

At present (1835) it is subdivided into 12 small districts, with 4 towns and 360 villages, and is supposed altogether to contain about 20,000 houses and 100,000 inhabitants of every description. That portion of the population which resides in the plains is almost entirely composed of Shans, while those on the hills west of Kalé are all Chins, or wild mountain tribes. The force kept up by the Kalé Raja principally consists of these Chins, who are only occasionally called upon.

KAM-BA-NEE—

A village near Bhamo

KAMIEN—

On the right bank of the Mogoung river, at the junction of the Fng-daw-choung. Consists of two stockades,—one on a small hill, the other at the foot. Both together contain about 32 houses. The inhabitants are Shans. It is a place of some consequence, as it is on the route from Sudiya to Mogoung. From Kamien, Shway-doung-gyee, a conspicuous mountain, bears east.

KAMTEE-CHICK—

Is a small stream fordable at the rapids. The extreme banks are not more than 50 or 40 yards apart.

KAN-GYEE DAING—

A village of 50 huts about 1½ miles north-east of Ta-noung-gaing. Population about 250. Lat 21° 43', long 95° 57'. Jaggery is manufactured here.

KAN-LOUNGS—

They are so called from being separated from the other Kachins, their name signifying "acknowledged rebels."

The following are some of the chiefs and sawbwas of these Kachins—

Chiefs of Kan-loungs (1879)

Chief Sa-goo-noung lives on Kansan-poon

Sawbwa Mawloowa lives on Mawloo-poon

Sawbwa San-oung lee lives on Mogoung Main-koung

Akyeewa Ponk lee-shoung lives on Toma-poon.

Sawbwa Laboola lives on Sakoo-poon.

Sawbwa Laboo-shoung lives on Sin-poung-poon.

Sawbwa Saramstee lives on See-hnin (Snowy) mountains.

The king sawbwa of the Kan-loungs, Mavan-gyee of Naga-kone la-poon, died and was succeeded by his son Ia-baing ka-shun-teng-nan, who now exercises sovereign authority.

The king sawbwa is more powerful than all other Kachin sawbwes. He is wise in his speech, and successful in his enterprises. Being acknowledged by many, and having numerous adherents, he attacked and killed the neighbouring sawbwes, and appointed governors from amongst his own adherents.

The country of these Kan-loungs now extends on the east to Sakae-poon and Sanka-poon, on the west beyond Ma-lee, or big river, or western branch of the Irrawaddy, on the south to Marawa hill, on the north to the Khampet territory.

These people, forming a large tribe, commit raids every year. When about to make war, the chief assembles large numbers of men by giving 4 or 5 ticals each of opium, and then leads them to attack and destroy neighbouring villages. The unfortunate inhabitants are treated as usual,—the adults killed, and the young boys and girls taken into slavery.

Owing to their large numbers, there is not sufficient land for these people to cultivate, they have therefore to cultivate the same "tonggyas" for three or four years.

This does not yield sufficient rice for food, so they have to supplement it with arums, yams, vetches and maize.

These people do not change their habitations from one place to another, but live in the same place. There are a few large trees on the hills. Not a Shan or Burman visits their country. If he wishes to visit, he can only do so by making friends with the sawbwa, the sawbwa personally coming out and receiving him, and personally following or accompanying him on his arrival and return.

If a man wants to marry, he has to give the parents cattle, pigs, gongs, muskets, daks, slaves, clothes, spears, and money, and for his wife's use he must give coral beads, *tamgyes*, jackets, broadcloths, &c., according to his circumstances. If he is not able to give them on the spot, he has to give a guarantee that he will do so hereafter. The woman is then brought to the man's house, and he feasts the bringers of her with curry and rice, and liquors them up. He must also give the elders blue waistcloths and *shu-ban-ds* turbans, daks, or spears, according to their degree. The man then shows the woman all the work to be done in the house and bids her do it. If the man dies, the woman cannot marry whom she pleases, but the deceased's brother must take and marry her.

If the father dies, the son takes over his wives, except his own mother. If a man's first wife dies, the man goes to her parents and demands another, and they must give him her elder or younger unmarried sister. If there is no sister, they give him a female relative. A relative of the wife is greatly respected, being called "father-in-law's relation." If any such come, the son-in-law must give property in proportion to their worth.

Divorce is not allowed, except under severe penalties. If the husband wishes to separate, he must give double the property he originally had to give for her. If the woman wishes to do so, she must give quadruple the amount of property originally given. If the man sets aside his wife and takes another, his head wife has the right to take possession of all the property of the younger wife, as well as to sell her. The father can sell his son's wives' children to any one else. If a woman on the death of her husband marries another man not connected with her husband, her son may sell her

The young unmarried men and women, so long as they are not brothers and sisters, act as they please inside the house

When a man dies, he has a splendid funeral, and after cattle, pigs, and poultry have been killed, all are feasted for 3 or 4 days with food and liquor

Deaths Young men and women from all quarters and surrounding the dead body dance and jump day and night The body is then interred in some sacred spot, and is surrounded by a trench 2 feet wide and 3 deep, and the centre heaped up like a small hill The body is enclosed in a coffin Posts are then erected and a roof constructed When the body is being interred, paddy, arums, flasks of kOUNG,* dahs, and wallets are put in the grave also And the skulls of cattle and pigs are hung up on a post near the grave

The skulls of cattle and pigs killed for sacrifice are hung up on posts in front of the house

The people above Maing-na call themselves Kansa Kachins, and have one sawbwa for each hill If the sawbwa be hereditary, young and old, women and men, attend to

Kansa Kachins. all his behests When there is a quarrel between two hills, nothing is done but by the commands of the sawbwa. Boys of 10 years old and men always go about with a dah and wallet They wear waist-

Dress. cloths 4 or 5 cubits long, and for turbans they wear sha-ban-du cloths, red or white They get their jackets from the Shans in exchange for sesamum, india-rubber, or cotton

Some wear hair knots, others cut the hair low on the ears The women wear black cloths 4 cubits long and 2 wide, folded round the waist and tied with a waistband The jackets are close-fitting, and over them they have a looser one ornamented with cowries The waistbands are also ornamented with cowries They wear hoops of rattan from the knees to the calves The men daily smoke opium

KOUNG and kazaw liquors are made by the women, and drunk by all men and women, old and young, daily

They do not trade, but barter sesamum, cotton, india-rubber, arums, or yams, with the Shans for salt and ngapee

During the summer the Kachins collect in bands of from 30 to 50, and attack some Shan, Burmese, or Kachin village distant 8 or 10 days' journey and set fire to it When the people come out, the grown-up men are cut down and killed, the boys and girls from 2 to 11 are taken and exchanged for silver, opium or cattle, or any other thing they require They have no compassion for human beings, and act like brutes If two men quarrel, the victor kills the other and seizes his wives and children and sells them to another If a man is fairly well to do, he has 3 or 4 slaves Sawbwes and

Slaves. chief men have, according to their rank and power, from 10 to 50 male and female slaves The slaves appear to be well treated, and work, eat, and drink with the master of the house and his family — (*Native information*)

Kansa and Kanloun These tribes are divided into the following Kachins. sub-classes —

1. Lapaka.	3. Lakoon.	5. Sedan	7. Kakoo.
2. Lasee	4. Lathoung	6. Kara.	8. Yoyin.

These all speak the same language

* A sort of liquor

KAN-SAN-POON—

A hill near the Irrawaddy, in lat $26^{\circ} 4'$, long $97^{\circ} 30'$ It is the head-quarters of the Kan-loung Kachiu chief Sa-goo-noung

KANSHIYAT TO THEETABWE—

Between the villages of Kanshiyat and Theetabwe the undulations of the surface become less sudden and marked, the swelling slopes more easy, and the ravines less deep This character continues past the village of Shadaing, and appears to be partly due to the presence of a thick ferruginous sandstone, under the clays and sands of the cliffs, which has resisted the erosion This is not the ferruginous pebbly conglomerate which appears to continue along here near to the base of the cliff, but a fine sandstone, with a few white quartz pebbles embedded in a red cementing sand Upon it rests the ordinary yellowish blue clay This character partially continues to Sit-tha-bo-gay

KANTEE, OR KHAMPTEE—

A Kantee chief left his country and became a vassal of the king of Burma. He said he was an hereditary sawbwa, and asked permission of the Burmese king to establish towns and villages This was granted, and he returned and established himself above the Nan-tha-bet stream in a large plain Their houses are like those of the Shans The men dress like Burmans The women wear garments dyed blue and black, sewn up in front like loongyees, and silver bracelets and earrings The people are Buddhists. In the native country of these Kantees, the sawbwes of Lone-kyeing and Loke-koon tribes went to war with each other, and the Loke-koon sawbwa being victorious, now governs the Kantee country The other, becoming a vassal of the king of Burma, has now established towns and villages, and levies what taxes he chooses from his people He makes a great present of gold and silver flowers to the king of Burma

KARA—

A subdivision of the Kansa Kachins

KARARHOKA—

A town in Yunnan in lat $24^{\circ} 40'$ and long $97^{\circ} 50'$

It is nearly half-way between Man-wyne and Sunda on the road between Bhamo and Momié It is the chief Chinese market in the valley The town consists of two long parallel lines of houses separated by a broad way, down the centre of which the booths and stalls are placed on the weekly market day — (*Anderson, 1868*)

KATE-TWAY-POON—

A hill near the Irrawaddy in lat $25^{\circ} 46'$, long $97^{\circ} 20'$ It is the head-quarters of a Kachin sawbwa.

KA-THA—

A town on the west bank of the Irrawaddy in lat $24^{\circ} 10'$, long $96^{\circ} 10'$

It is a long town containing at least 200 well built timber houses disposed in two parallel streets, and surrounded by bamboo palisades with three gates

It is the head-quarters of the woon of a considerable district, inhabited by Shan Burmans

"Long hollows of rich alluvium cultivated for rice, and closed in by undulating land covered with valuable forest trees, including teak, separate the town from the western hills. Some cotton is grown, and tobacco largely raised on the islands and sandbanks. The people seemed well clad and well-to-do, and the women were busily employed in weaving and preparing colored cotton yarns for the manufacture of putzes and tameins." —(*Anderson, 1868*)

KAUNG-TING—

"One of four pagodas built in the kingdom of Sampenago in the 218th year of the Buddhist sacred era." —(*Anderson*)

KAYA-BO—

A village about a mile from Da-hat-taw, in lat (about) $21^{\circ} 20'$, long (about) $95^{\circ} 20'$. It consists of two clusters of huts numbering about 70 situated about half a mile apart. Population about 350.

KAYIN-TEH—

A village $1\frac{1}{2}$ miles from Kyaw zee, in lat $21^{\circ} 18'$, long $95^{\circ} 18'$. Contains about 60 houses. Population about 300.

KEN-LAY—

Is the military post dividing Burma proper from the tributary Shan states.

KIANG-HAI—

Stands on the west bank of Me-kong, also the brick ruins of the fort of same name, formerly a place of great importance. —(*McLeod*)

KIANG-HUNG—

The town, which is of no size, stands on the western face of a range of hills running north and south in front of it. The May ha joins the May-choung, and during the rains their united waters form an extensive sheet. Now, however, the streams of both are confined within narrow beds, and only a plain of sand meets the eye.

This place is not fortified. There is one wide road running from one end of it to the other, and along this there are a great many houses belonging to the Chinese, very poor in their appearance. The streets are narrow, scarcely better than pathways, running up the sides of the hills without any regularity, and along which terraces have been cut to admit of houses being built. The palace is a conspicuous building, standing on the high ground at the foot of the hills at the northern extremity of the town. The only other objects to be noticed are two or three monasteries, some small pagodas on the face of the hills, and a few banian trees here and there. With the exception of the valley of May ha, the country round is hilly and extremely barren in appearance.

Kiang-lem was formerly the residence of the sawbwa, and was also called Kiang-hung. The site of the capital was changed to its present locality by the late sawbwa after he became firmly fixed in the chieftainship. —(*McLeod*)

KID-DING—

A Shan town. It is larger than either Tubone or Nempean, it is on the left bank of the Saksai. Rapids are common in the Tooroon, but are not of any severity.

KOKE-KEH—

A village 1 mile north of Ywa-tha-ya. Population 800.

KONE-YWA—

A small village north-east of Myotha, in lat $21^{\circ} 35'$, long $95^{\circ} 53'$. Contains 250 houses. Population 1,250.

This village is on the right bank of the Irrawaddy and a station of the Flotilla Company's steamers

The ground rises from the river gradually, and after passing the village is in large fields with euphorbia hedges very open and passable, there are many large open spaces. At about 3 miles distance from the river in a north-north-west direction the ground is about 17.5 feet above the top of river bank at least, and there is fine open ground which would be very good for camping. There are, however, no trees for shelter. Here is the village of Pong-loung-gan. Behind this the ground rises higher for about 500 yards, and then sinks a little towards north. A mile further inland is the village of Cher-wa, and to east is another village. All these villages are surrounded by stockades of thorn bushes. Kone-ywa has only lately been made a station of call for the steamers, and this is because the former station, Pakoko, a few miles to the south, is cut off from the river by a large sand-bank — (*D M*, 1882)

KOKO-GOON—

A small village 71 miles from Myin-gyan on the road to Yemay-then. There is much paddy cultivation in the surrounding country.

KOOLA ZWAY—

A small village of 20 houses on the road from Myin-gyan to Nyin-gyan, and 26 miles distant from the former place. It is on the top of a small hill. The water-supply is bad — (*Bozall*, 1882)

KOOM-BO BIE—

A miserable looking village of 7 or 8 houses on the road from Myin-gyan to Nyin-gyan, and about 32½ miles from the former town. The road leading to it is a sandy gravel and very narrow.

KOUNG-BO—

A village. The people wash for gold.

KOWLE, or KOWRIF—

The Kowie, or Kowie, and Lakone are the two chief tribes in the hills of the Taping valley, but numerous subdivisions of clans occur. All are said to have originally come from the Kakoo's country north-east of Mogoung, and Shau informed Dr Anderson that two hundred years ago Kachins were unknown in the Sanda and Hotha valleys.

Among these hill tribes the patriarchal system of government prevails, although a certain obedience is nominally due to Burmese or Chinese authorities. Each clan is ruled by an hereditary chief, or sawbwa, assisted by lieutenants, or pawmines, who adjudicate all disputes among the villagers. Their office is also hereditary and properly limited to the eldest son, whereas the chieftainship descends to the youngest son, or failing sons, the youngest surviving brother.

The land also follows this law of inheritance, the younger sons in all cases inheriting, while the elder go forth and clear wild land for themselves.

Between Sit-kaw and Man-wyne seven clans under separate chiefs are met with, each chief considering himself entitled to exact a toll of four annas per muleload from travellers through his district. The chieftain's goodwill being secured by payment of his toll, or blackmail, that of his people follows as a matter of course. When the traveller quits the lands of one chief, he is handed over by his guide to the next headman, and is as safe with him as with the former.

As a rule, the chief owns the slaves found every where among these people. Most have been stolen as children, but adults are also kidnapped.

The women become concubines The men are well treated, if industrious and willing The children of slaves belong to the owners, but really are as well treated as the members of his family

Slaves

When a sawbwa marries, he is expected to present a slave to his father-in-law, among the other gifts

The market value of a boy or girl is about 40 rupees, a man not more than 20 to 30 rupees, or a buffalo

Every house pays the chief an annual tribute of a basket of rice Whenever a buffalo is killed, a quarter is presented to him

The chief tribute.

He is usually a trader, and, besides the receipt of tolls, derives a profit from the hire of mules or coolies for transport

The Kachin villages are always situated near a perennial mountain stream, generally in a sheltered glen, or straggling with their enclosures up a gentle slope covering a

Kachin villages.

mile of ground The houses, which usually face eastwards, are all built on the same plan as that described under *Ponine* The most usual dimensions are about 150 to 200 feet in length and 40 to 50 in breadth These large bamboo structures are veritable barracks The first room is hospitably reserved for strangers, the others form the apartments of several families connected by blood or marriage, who compose the household community The back entrance is reserved for the use of the members of these families The projecting eaves, supported by posts which are adorned with the skulls of buffaloes and pigs, form a portico, where the men and women lounge or work by day, and at night the live stock, buffaloes, mules, ponies, pigs, and poultry, are housed, while a bamboo fence guards them from possible thief or leopard

Near the houses are small enclosures, where white flowered poppies, plantains, and indigo are cultivated Paddy and

Cultivation.

maize are grown together on the adjacent slopes and knolls, which are carefully scarped in terraces, presenting often the appearance of an amphitheatre The stream is dammed near the highest point, and directed so as to overflow the terraces and rejoin the channel at the base Bamboo conduits are sometimes used to convey the water to paddy fields or distant houses

Fresh clearings are made every year by felling and burning the forests on the hillsides Near every village disused paths may be seen, which have been cut to former clearings, and along which a little canal has been carried The cleared ground is broken up with a rude hoe, but in the cultivated terraces wooden ploughs are used Excessive rain, which makes the paddy weak and the yield scanty, is most dreaded

Generally the natural fertility of the soil more than repays the rude husbandry with beautiful crops of rice, maize, cotton, and tobacco of excellent quality Near the villages peaches, pomegranates, and guavas are grown, and the forest abounds with chestnuts, plums, cherries, and various wild bramble berries On the higher slopes oaks and birches grow in abundance, and large areas are covered with cinnamon, cardamum, and C. cassia. The tea plant grows freely on the eastern sides of the hills — (Anderson, 1868)

KUBO VALLEY—

Between the eastern boundary of the Manipur valley and the Ning-thee river there is a narrow strip of level country called the Kubo valley, which,

commencing from the foot of the hills in lat $24^{\circ} 30'$ north, extends south to $22^{\circ} 30'$, where it terminates on the left bank of the Kathé Choung, or Manipur river, which falls into the Nang-thee, and marks the southern limit of the Kalay Raja's territory

In his account of the *Mission to the Court of Ava in 1855*, page 277, Captain Yule makes the following remarks about the Kubo valley —

"Of the middle course of the Chin-dwin between the valley of the amber mines in lat $26^{\circ} 30'$ and the Burmese post of Kendat, which has several times been visited by our officers, little is known. The Burmans, I believe, scarcely exercise any jurisdiction over the inhabitants, who are chiefly Shans along the river, the Kachins and other wild tribes keeping to the hills

"The first bar to the traffic up the river is at Kaksa, in lat $24^{\circ} 47'$. The lower part of the Ooroo valley is said to be peopled and well cultivated. Below the Ooroo the narrow alluvial valley of the Chin-dwin is also tolerably well peopled, and affords occasional rice grounds fertilized by annual inundation

"West of the river, between parallels $22^{\circ} 30'$ and $24^{\circ} 30'$, stretches from north to south the valley of Kubo

"This valley, the northern part of which was long a bone of contention between Ava and Manipur, was in 1833 made over to the former, at the instance of Colonel Burney, by the authority of the British Government, compensation being made to Manipur. It is a long strip not more than 15 miles in greatest width, separated from the Chin-dwin by a range of uninhabited and forest-clad hills called Ungoching

"The valley itself is, with the exception of sparse clearances for cultivation, a mass of forest abounding in varnish and wood-oil trees, and in valuable timber, sal and teak, and though its inhabitants are remarkably hardy, it is notorious for jungle fever, most fatal to strangers

"The northern portion of the valley, called by the Burmans Thounghthwot, by the Kathays or Manipurs Sum-jok, and the southern called Kalay, are still under the rule of the native Shan sawbwas tributary to Ava. The central portion, Khumbat, is under a Burmese governor. Kalay is much the most populous part of the valley. It produces rice and cotton, wax and ivory. The hills to the west of Kalay are occupied by the Chins

"The Chin-dwin is navigable for the largest boats of the Irrawaddy up to Kendat, and the trade is very considerable in grain from the lower part of the river, as well as to some extent from the valley of the Ooroo"

Pemberton describes the Kubo valley in a *Report on the Eastern Frontier of British India*, page 117 —

"The Kubo valley, when viewed from the heights above it, presents a vast expanse of dark primeval sal forest, in the very heart of which cleared spaces are discerned varying from two to six or eight miles in circumference, as the spot happens to be the site of a village or town. In this respect it offers a very remarkable contrast to the Manipur valley, which is free from forest of every description. The characteristic differences of the streams are no less remarkable. Those of the Kubo flow with extraordinary velocity over beds invariably composed of water-worn pebbles, and the stream itself is as clear as crystal. Those which pass through the central portion of the Manipur valley move with far less rapidity. The stream holds

much earthy matter in suspension, and the beds are generally of the light sandy or stiff clay soil, with scarcely a pebble of any description

"In Kubo during the cold season of the year every stream is fordable, and in few is the water so much as knee-deep. In the rains, on the contrary, they rush over their highly inclined beds with a velocity too great for the power of an elephant to stem, and the whole country between the Ungoching hills and the Khumbat and Maglang rivers is at this time frequently covered with one vast sheet of water. Fortunately they rise and fall with nearly equal rapidity, and unless the rain has been very general and heavy, the larger streams may be crossed on rafts or dingies in about thirty hours after its cessation

"Sickness in its most appalling form of jungle fever and ague prevails in every part of this valley during the rainy season. Foreigners of every description, including even the people of Manipur, are equally the victims of its attacks, and yet the original Shans, by whom it has always been occupied, are remarkable for their athletic frames, their hardihood and vigour, and for a longevity fully equal to that attained by the inhabitants of more salubrious spots"

Dr Browne, however, considered that the inhabitants of this valley, though hardy, were inferior to the Manipurs in physique

The Kubo valley is under the authority of the following officials. The south part is under the Kalay woon, a Burmese official residing at Kalay wa. The middle part, comprising the townships of Tamoo and Khan-pat, is under the Khan-pat woon, who lives at Kendat. The bishop of Tamoo, Oo Endawara, has spiritual jurisdiction over 37 villages. Though a Yahan, he interferes a good deal in civil matters, but to his honour it must be said that his interference is almost always for the public good. He is greatly revered, and even feared, for it is known that he is in the habit of communicating direct with the Hlwoot, as almost all high ecclesiastics do in Upper Burma. In outlying districts this ecclesiastical power acts as a check on tyranny

The north part of the valley is under the Thoung thwoot sawbwa (or Sumjok Raja as he is termed by the Manipurs). Mentha village is the boundary between Thoung thwoot and Tamoo

The foreign relations of the Thoung thwoot are controlled by the Lay-chayem woon, who exercises the powers of a frontier commissioner. He is also called the Pagan woon, from having once acted as governor of the Pagan district. His name is Moung Pagan. His titles in Burmese are—"Governor of the following four districts,—the Shway district of 19 villages, the Ooyoo district of 10 villages, and the two townships of Moun nyoung and Mein-gein, great ruler, illustrious prince". He is nearly related to the Khan-pat mengyee (the foreign minister), and therefore to the new queen, who is said to be the Khan pat mengyee's granddaughter. He lives at Pong-byn on the Chin-dwin river, between Thoung thwoot and Kendat, about a day's journey from the former. His jurisdiction extends east over the Shan districts up to the borders of Mogoung—(Phayre, 1882)

KULLELANG—

A small village on the route from Sudiya (in Assam) to Mogoung, it contains 8 houses, it is not stockaded

KUNG—

An assistant to a provincial official in Upper Burma

KWOT LOON—

This is a village in the small state of Muang-maw on the right bank of the Shway-lay —(Anderson.)

KYAN-NHYAT-MYO—

A town on the Irrawaddy in lat 22° 58', long 95° 55'

KYAW-ZEE—

A village 1½ miles from Man-lain, in lat (about) 21° 17', long (about) 95° 52' Contains about 60 houses. Population about 300

KYOON-BIN-KON—

A village There is a fine phoongyee house, pagodas, and zayats The inhabitants obtain their water from a small tank This is scarcely drinkable, better obtainable from the Nawin-choung, distant one mile

KYOK TA-LOUNG, or KYOK TA-LONE—

A large village on the left bank of the Irrawaddy, about 28 miles north of Sin myee-kone and 13 and 14 miles south-east of Ava The shores of the river between these two places were fringed almost continuously with rich wood, embosoming numerous villages and pagoda spires, the river side near Kyok-ta-lone is lined with quick-set hedges

The mass of trees, tamarinds especially, which overshadows the village, renders it impossible to judge correctly of its size, but it did not appear to

Cattle

Captain Yule (1855) as a place of any considerable extent A great number of cattle were penned in the compounds round the houses, and numerous hedged lanes led through the place in all directions

Below Kyok ta lone is a low undulating tract scarcely to be called

Country

hilly The whole country inland as seen from the higher points is arid, parched and barren, the sandy, dry, and yellow soil peeping out everywhere and scarcely hidden by the half ground brushwood which sparsely covers it Many cart roads, however, traversed the summits and were in good order, the natural drainage being favourable —(Yule)

The hollows are cultivated with rice This, with sesamum, a little cotton,

Cultivation

and red pepper, is the chief cultivation Along the higher ground not a tree was to be seen higher than a man The country must be inconceivably barren in the dry season —(Yule)

This is a custom house station where all boats descending the river are overhauled. Steamers are not, however, searched here A road runs from this to Ava, which is reported to be good in the dry weather

A strip of trees a few hundred yards inland marks where the road lies

Between it and the river the country is quite open

KYOK-YAY MYO—

A town on the left bank of the Irrawaddy, said to contain 2,500 inhabitants It is 6½ miles north of Tha-bya-bin Two miles south of this is the village of Sa-lay,—famous for the Burmese blankets manufactured there Ywa-thit is a mile north of Kyok-yeh, and consists of about 30 huts There are numbers of cattle in this district. Fishing is carried on here to a great extent

The village is situated on an elevated portion of the bank about 80 feet high and 500 yards long The northern part is green with vegetation Geological formation, sandstone There are several pagodas here, and inland some three or four miles distant are some hills covered with pagodas

Part of the village is situated on the low ground to south of where the high bank breaks off —(*D M*, 1882)

A road runs from Yay-nan-gyoung up to the stream near Kyonk-yay-myo through open ground The telegraph wire runs along it

L

LA-BAING-KA-SHIN-TEING-NAN—

The king sawbwa of the Kan-loung Kachins He succeeded his father Maran-gyee not long ago, and now governs all the tribes The king sawbwa is more powerful than all other Kachin sawbwes He is wise of speech and successful in his enterprises Being acknowledged by many and having numerous adherents, he attacked and killed the neighbouring sawbwes, and appointed governors from amongst his own adherents —(*Native information*, 1879)

LA BOO-LA—

A sawbwa of the Kan-loung Kachins

LABOO SHOUNG—

A sawbwa of the Kan loung Kachins

LAING-ZAN MOO POON—

A Kachin sawbwa's head quarters It is a hill near the Irrawaddy, lat 20° 36, long 97 10'

LA-KOOND—

A subdivision of the Kansa Kachins

LAM-NA—

A subdivision of the Maroo tribe of Kachins

LA-PAKE—

A subdivision of the Kansa Kachins

LA-POUKE—

A subdivision of the Maroo tribe of Kachins

LA-SEE—

A subdivision of the Kansa Kachins

LA SEE—

"A village in the Kachin hills east of Bhamo, situated on a lofty rounded peak From this hill a good view is obtained of the ranges to the south These run nearly parallel to each other, with intervening valleys much broken up by spurs"—(*Anderson*)

LA THA—

The town of La-tha is in the district of the same name, and on the route followed by Sladen's Expedition in 1868 The Namsa river separates it from the road It appeared to be the largest and most populous in the whole valley The people seemed thriving —(*Anderson*, 1868)

LA-THOUNG—

A subdivision of the Kansa Kachins

LA-WIN—

A subdivision of the Maroo tribe of Kachins

LAY DAY—

A village north-east of Myin-gyan, about three miles distant Road fair in dry weather, but muddy in September Population about 1,000

LAY-DEAH—

Lay-deah town is in lat (estimated) 21° 16' 19" and long (assumed about) 97° 30', elevation (by boiling point) 2,840 feet, (by aneroids) 2,895 feet.

The small stream along the west side of the town runs up north for a short distance and then joins the main stream of the valley, the "Nam-tain" or "Thien-Choung," a very broad and swift flowing rivulet that takes its rise among the high hills south-west of Mine-kine, called Loi-tain-pa and Tain-doung (the people inhabiting these hills are of the Pa-loung tribe, they cultivate the poppy and manufacture opium). The Nam-tain after getting out of the Mine-kine valley, as before stated, runs north and south, draining the great Lay-deah valley towards the Salween river.

Lay-deah myo, like many other of the large towns in the Shan states, was formerly of much greater importance, owing to local disturbances, quarrels among the native chiefs, and other causes. This once-flourishing town now comprises barely two hundred houses. The high street or main road through the town is very broad and nearly half a mile long. It runs east and west, with cross-roads at either end. The houses are small and low, as all Shan houses generally are, with little gardens and irregular enclosures around them. The town itself is enclosed by an embankment on the north side and a moat on the south. A stream runs along the west side, and a large tank bounds the east.

From Lay-deah the Salween is about 70 miles in a straight line due east. There is a good road down to the Ta-caw ferry. It passes over a great common and gently undulating open downs, and when at 16 miles from the town (Lay-deah) the road passes up a sloping scarp that runs north and south on to another great spread of undulating country devoid of jungle.

Fifteen miles further on the road ascends another scarp, and about four or five miles further again rises and winds among cliffs and rocky isolated bluffs of limestone. Having passed this somewhat hilly ground, the road begins to descend, and when at rather more than forty miles from Lay-deah the descent becomes much steeper, the latter part through thick jungle, till the narrow valley of the Nam-pan is reached. The bed of this valley is nearly 1,300 feet lower than Lay-deah, and rather more than 700 feet above the level of the Salween water at Ta-caw.

LAY-DOUNGAN—

The first halting place on the route from Toungoo to Myin-gyan *via* Yemay-then and Hlone-det. Water indifferent from a tank — (*Watson and Fedden, 1864*)

LAY-MYO—

A town one hundred miles north of Bhamo on the Nam-tha-bet, an affluent of the Irrawaddy. There is a route between this place and Hoothaw, or Weoraw, a town three days' north west from Momien — (*Anderson, 1875*)

LEE-SAWS—

The Lee-saws are an uncivilized tribe occurring on the hills about the Hotha and Sanda valleys, and they appear to be the same people that Mr Cooper met with under the name of 'Luesus' on the northern extremity of Yunnan, if not in Thibet itself. A Shan informed Dr Anderson that they extend as far south as Kiang-hung yee, and the Hotha sawbwa mentioned that they are also found on the mountains to the east of Yungchan. They are not numerous about the valleys, but are said to occur in

great numbers in these and other localities. They live in villages of their own, apart from the Kachins, who regard them as an inferior race, and in some localities exact tribute from them.

They are a small hill people, with fair round flat faces, high cheek bones, and some little obliquity of the eye. The dress of the women resembles the costume of the Chinese Shans, with the exception of the turban, which is made of coarse white cloth, patched with blue squares and trimmed with cowries. They wear close-fitting leggings made of squares of blue and white cloth, and a profusion of rattan, bamboo, and straw hoops round the loins and neck, in addition to necklaces of large blue beads, and others of seeds, and large brass earrings. A white embroidered bag is slung over the shoulders from a broad red band ornamented with a profusion of cowries.

There is a strong affinity between their language and the Burmese, so much so as to suggest the probability that the two peoples are sprung from the same stock.

These little known Lee-saws appear to have a wide distribution over the mountains of Yunnan.

LET-PAU-CHAY-BAW—

A village on the left bank of the Irrawaddy, between Let-toke and Ma-gyee-zouk — (*Native information, 1881*)

LET-TOKE—

A village $3\frac{1}{2}$ miles north-east of Ma-gyee-zouk. It contains about 500 inhabitants. Indian-corn is cultivated.

There is a road between this village and Ma-gyee-zouk, which is good in dry weather, but knee deep with mud during the rains.

Snakes are said to be very numerous in this village, and many cases of death from their bites occur among men and cattle — (*Native information, 1881*)

LI-HSIEH TAI—

Mr Margary thus writes about this man: "A furious ex-brigand called Li-Hsieh Tai, who attacked our last expedition in 1867, has been rewarded lately for his services against the rebels with a military command over all this country (Yunnan). He is here (Man-wyne), and I felt much curiosity to see how he would receive me. To my surprise he prostrated himself and paid me the highest honours. I had a most successful interview."

LIN-DOR—

A small village on the road from Myin-gyan to Yemay then, $53\frac{1}{2}$ miles from the former place. Country stony and hard. Water from a deep well.

LOAY-LINE—

A small Kachin village near the route from Loay-lone to Hoe-tone.

LOAY-LONE—

A Kachin village in lat $24^{\circ} 25'$, long $97^{\circ} 25'$. It lies a hundred feet below the road from Hotha to Bhamo. It is the largest and most thriving town met on this route, and the chief's house was surrounded by a high bamboo fence.

Above Loay-lone are the remains of an old Chinese fort commanding this route as a custom-house.

The ordinary central route to Momen is said to be from this place to Muang-wan, a view of which valley can be gained from the Chinese fort of the Loay-lone, whence the road leads to Nantan, avoiding the Hotha valley.

The direct road to Hsue tone is only six miles by a comparatively level route along the paddy fields — (*Anderson, 1869*)

LOIS-AT (Hill)—

Is the highest part on the southern range. Having ascended to the foot of the crag, and within a few hundred feet of the top, I was prohibited by the people of a large village in the vicinity from proceeding any further, on the plea that there was some sacred footprint above, and that permission must first be obtained from the headman of the town in the valley. This was too much of a joke to descend seven miles for permission and mount again, so I contented myself by making my observations at the elevation attained, which proved to be about 1,500 to 1,800 feet above Mine-yaw, and over 4,000 feet above the level of the sea. Its lat (estimated) is $23^{\circ} 0' 10''$ N, long (assumed) about 93° E — (*Wilcox*)

LON-KIANG—

The Chinese name for the Salween

LOON-GYI F ISLAND

A large island on the Irrawaddy above the village of Zoung gyau-doung. It is covered with fine trees. The coast lies up the eastern channel. The country to the east shows low undulations covered with sparse small trees, and with little or no sign of cultivation — (*Jule*)

LUN BAING—

A village of 30 or 40 houses

M

MA CHANG—

A village of Mirip tribe

MA-CHONG—

A village of Mirip tribe

MADEYA—

Captain Yule ascended the Madeya river in September 1855, and gives the following account of his visit to the town of the same name —

"From the little village called Powa, at the mouth of the Madeya river, we ascended in a canoe about two miles to Myit-thein. Here a branch of the Madeya river strikes off southwards, and from hence we proceeded on ponies. Passing through several populous villages on the banks of the Madeya-choung, we then struck into a great expanse of rice fields, of which there was a more extensive series here than we had seen since leaving Pegu. The line of villages appeared almost continuous on our left till lost in the great mass of gardens round Madeya myo. This is about four miles distant from Myit thein. Never have I seen a denser mass of productive trees than this, which seemed to stretch for a length of three or four miles by perhaps one mile in width. It was a perfect forest of cocoanut and areca palms, jacks, custard apples, betel, vines, &c., whilst the ground was covered with dense thicket or swamped in water.

"For a mile or more the road through this dense and fruitful thicket was paved with brick, and had brick parapets on either side. Kyoungs and houses began to be scattered more frequently among the foliage, till passing by a wooden bridge over a fine full stream flowing rapidly to the south, the town is entered.

"This river called the Shway ta-choung breaks off above the town from the Madeya river, and discharges itself into that creek or channel of the great river which passes near the Arakan temple, and washes the north-eastern corner of the capital. The valley of Madeya-choung is said to extend back nearly to the ruby mine district.

"The town of Madeya seemed to be a large and populous place for Burma, and the houses amounted to fully 3,000. Small monasteries and pagodas are numerous for a considerable distance north of the town"—(*Yule*)

MAG-GASOO—

A village of 40 or 50 houses, 76 miles from Myin-gyan, on the road to Yemay-then. There is much paddy cultivation about here, and plenty of bullocks—(*Loxell*, 1882)

MAGWAY—

Is a large town on the left bank. When Captain Yule visited it there were 200 or 300 boats of all sorts lying at the ghats. The number of houses was said to be 3,000.

The principal temple of Magway is called Mya-thalwon (or 'emerald couch'). It stands on a high commanding summit over the river*. The cottages in the suburbs were good and almost all provided with a large porch. The principal houses along the main street were occupied by armed men. "Magway consists of one main street, and many minor streets behind"—(*Yule*)

Captain Yule considered the population to be at least 3,000 or 4,000†

Population Burmese accounts give a population of 3,000 (1881)

The country to the rear of the town is open and rolling, divided into fields by hedges. These fields are chiefly sown with sesamum.

"There were two large monasteries of plain but very solid structure, with a wooden *thien* or chapel, and a pagoda. The whole area, including an extensive compound, was enclosed in a very massive teak fence of squared posts and rails some 7 or 8 feet high"—(*Yule*)

About Magway the country is level and flat, but passing north a remarkable change in the general character of the east bank is observed. For many miles to the north the country is cut up by a succession of deep ravines and watercourses, which cut through the soft beds of sand and pebbly gravels and a succession of these gullies comes down to the water's edge, deeply indenting the otherwise straight and almost perpendicular cliff, which constitutes the main bank of the river.

This bank is 100 to 170 feet high and steep, and the peculiar undulating surface of the grassy slopes above, with the marked profile of the cliff overhanging the river, form many beautiful scenes. Along here fossilized wood occurs on the banks, not unfrequently of considerable size, worked out of the sand and gravel of which the cliffs are formed.

This remarkable ravine character of the bank is not seen fully until the village of Muggee bin is passed. Here the full force of the current has come against the rocks, and exposed a good section, showing a succession of clayey sands, of sands, and pebbly sands. Frequently intercalated masses of irregular lenticularly shaped beds of a hard calcareous sandstone occur, and occasionally of a dense ferruginous conglomerate.

The great mass of the cliffs is of a greyish or yellowish grey sand, or clayey sand, abounding in laminae of false bedding, and obviously the result of a very irregular deposition.

* There are many trees about this pagoda, and it could easily be strengthened for defence.

† Major Storer estimates the population at 4,000 (1881)

Over all this ground the trees are small, stunted and scattered, and the whole country looks parched, arid, and poor. Around the villages at the mouths of the small creeks and streams some large well-grown timber is seen, but the general aspect is that of a very sparsely covered grassy plain with deep and nearly precipitous ravines. It is the head-quarters of a woon.

Crops — Sesamum, cotton, peas, and beans

Supplies — Mutton, fowls, fish, rice, chillies, ghee, peas, and beans

Transport — The following —

Bullocks	about 450
Carts	about 200
Boats	about 40—of 400 to 600 baskets.
Boats	about 10 smaller

There is a bazaar here. The streets are crooked and from 15 to 30 feet wide. Some of the main streets are straight. There are no open spaces. A fence of bamboo and thorns surrounds the town. There are four Chinese brick houses, in which some ten Chinese live. The remainder are timber and bamboo.

At the northern end of the town is the Tago-gyee pagoda. A narrow and bad road leads to it. On the hill there is a plain that will hold over 1,000 people. Proceeding a mile north of the hill, the road becomes narrower and there are jungles on both sides, but after this it is good. The telegraph runs along this road — (*Native information, 1881*)

MA-GYEE-ZOUK—

A village $\frac{1}{2}$ mile from Thit-touk Ywa-ma. Indian-corn is cultivated.

MAH-LINE MYO—

Market town. A town on the road from Myin-gyan to Nyin-gyan. It is a great market for the surrounding country. Products such as rice, cotton, til seed, and millet are brought here. From three to four hundred carts come in on market days. It is not a large place, but the woon of the district lives here. Water-supply good, from several wells. The town is $4\frac{1}{2}$ miles distant from Myin-gyan.

MAH PHAY-MYO—

A town on the Irrawaddy.

MAING-DAING LOO—

A Kachin sawbwa. He lives at Mara-poon.

MAING-MAW—

This place contains 20 or more Shan Kadoo houses and 5 Kachin houses. The former cultivate rice, and the latter toungyas.

MAING-NA—

The inhabitants of the above are Shan Kadoos. There is a Burmese thoo-gyee in each, and over these a myo-oke called the lay-myo-oke ('five city myo-oke').

Above Maing na the Burmese territory ceases. The people are Kachins, who live under hill chiefs of their own. The following are some of their sawbwas —

- 1 Souk loe Sawbwa of the Ka-chang mountains 1879
- 2 Saing yan moo Sawbwa of the Laing yan moo-poon (4), 1879
- 3 Patone-wa, Sawbwa of the Pouk san-poon 1879
- 4 Souk kan Sawbwa of the Moon koun-poon 1879
- 5 Suk moon, Sawbwa of the Mara hill (3) 1879
- 6 Marekka-tantoo-naw Sawbwa of the Kate-tway poon 1879
- 7 Touk lone-ka, Akyeswa, Sawbwa of the Poon-ga hill 1879
- 8 Wa-wiu wa, Sawbwa of the Nan-seing yin poon, 1879
- 9 Maing-daing too, Sawbwa of the Mara-poon (4), 1879

MAIN-KHWON—

A village in Main-khwon district, in lat. $96^{\circ} 9'$, long $26^{\circ} 20'$

MAIN-KWENG-HNOP—

A village in Main-khwon district

MALAN—

A subdivision of the Maroo tribe of Kachins

MA-LAY—

Ma-lay, or Man-lay, formerly called Muang-lay, is situated on the western bank of the Irrawaddy in lat $22^{\circ} 42'$ and long $95^{\circ} 55'$

It contains about 300 houses, and is the customs port for clearing boats bound from Bhamo to Mandalay, and the centre of a considerable trade in bamboo mats, sesamum oil, and jaggery. It is the northern entrance of the first defile above Mandalay. There are two prominent headlands, the one on this side being crowned by the pagoda of Ma-lay.

From this may be seen rising to the eastward the fine peaked mountains of Shway-toung about 6,000 feet high, on which snow is said to lie in the winter.

Above Ma-lay the river widens to a great breadth, with numerous islands as far as Khyan-Nhyat.—(*Anderson, 1868*)

MALOO-LA—

A village on the left bank of the Taping

MALLOON—

Gives its name to a district, but the residence of the governor has been transferred to Myiu-hla.

Malloon is now (1855) but a small village standing on the gentle slope of a hill which rises behind to an apex crowned with many temples of various forms.

It was here that towards the end of the first Burmese war the Burmese army made a stand. The British army under Sir A. Campbell halted on the opposite bank and a flag of truce was sent by the Burmans, with proposals of peace. Although commissioners from both sides met, it became evident that the Burmese were insincere, and therefore the negotiations fell through, and Sir A. Campbell gave the Burmans the option of handing over Malloon to him, in which case he promised them the desired extension of the truce, or to prepare for an immediate attack.

The Burmans, with much courage, instantly prepared for their defence. Early on the 19th January 1826, they were driven out of the town by a mere handful of British troops. The Burmans numbered 15,000. Near the shore is a cenotaph pagoda in memory of the celebrated Bandoola — (*1846—Lourse*)

MAN—

A village of Mirip tribe

MANCHLE—

A Khamptee village on the right bank of the Irrawaddy in lat $27^{\circ} 26'$. There was a weekly market here when Captain Wilcox visited the place in 1825. He supposed the branch of the Irrawaddy seen here was the main one instead of being only a small tributary.

MANDALAY—

This is the present capital of Native Burma, and is situated on the Irrawaddy in lat 22° , long $96^{\circ} 5'$ (about), on some slightly elevated ground at the foot of the Mandalay hill, a little more than $2\frac{1}{2}$ miles from the river.

General description.

It was founded in 1858 by the late king, and it is said that one of his motives for removing his capital from Ava was to remove his palace from the sight and sound of British steamers.

The city is built in the form of a square, in the centre of which is the palace square, both fortified after the manner of the Burmans.

The outer square is inhabited by the officials, civil and military, and the soldiers of the royal army.

The roads are well kept and wide, and are all bordered with a latticed fence, or else an outer wall, which forms a sort of compound to the house, and hiding, as it does, much of the household dirt, tends to make the streets look much tidier and cleaner than they would otherwise. The palace enclosure, or royal square, is surrounded by an outer stockade of teak wood posts twelve feet high, and an inner wall. Between these two is a space of about twenty yards. Entrance is given by two gates opposite to each other. Inside is the royal palace, and the arsenal and gardens.

All Burmans entering are obliged to take off their shoes, as the precincts of the royal palace are considered sacred. I give a plan of the interior of the palace which I made from native information. The city is surrounded by a wall 30 feet high of mud and brick, the outer revetting being of 3 feet brick. There are three gates on each face which lead to a beam about 60 feet wide between the wall and the ditch, the ditch itself being about 100 feet wide. On the west side two bridges span the moat, but on the others only one. The gateways are all provided with massive teak wood gates, inside of which are guard houses, and in front on the outside traverses cover the gates. The bridges are masonry at both ends and woodwork in the centre, which could in case of necessity be removed. Outside of the city are extensive suburbs, which extend to the river bank on the west, the embankment on the east, a few blocks distance on the north, and on the south irregularly from a few (two or three) blocks on the south east, to as far as Amara-poorā along the road leading to that place.

MANDALAY HILL—

To the north east of the city is the hill of Mandalay. This is 550 feet high above city ditch, and about a mile from south to north. It is a large rock, and is covered with trees and birchwood on most parts. The south-west slope is nearly bare, being uncovered rock.

Between the city and the hill are a lot of *kyoungs* and *zayats* and pagodas—beautiful buildings covered with most elaborate carving in teak wood and gracefully tapering upwards. These *kyoungs* are scattered all about the hill. On the east side are two very elaborate buildings erected one by the king and the other by the queen. The one nearest the hill has in its centre a pagoda with a gilt dome, and around it innumerable unnamed buildings, all of uniform size. These, I was told, were *zayats*. The sides must be about two or three hundred yards square. The other is a large pyramidal building of six stories. All the space between the hill and the lake, except a part set aside as a practice ground for the troops, is occupied by *kyoungs* and gardens. West of the hill there are a great many *kyoungs* and pagodas, as also to the north between the base and embankment. The embankment runs immediately to the north of the hill, east and west, and beyond it a canal, which connects the Nanda lake with the Shway ta-chung. North-east is the Nanda lake, which joins with the Oung pin lay, which lies between the eastern suburbs and the Shan hills.

MANDALAY TOWN—

The town of Mandalay, like the city, is divided into blocks, each of 183 yards square. The streets are wide, and in some cases good, and run parallel to each other north and south, and cut others at right angles running east and west. On the west side between the city and river the Shway-ta-choung and Theng-za creek flow. The former is crossed by many wooden bridges, and the latter by two causeways.

The embankment surrounds the whole city and suburbs completely, and while it keeps out the river floods, it retains the accumulated rain water, which sometimes finds an exit for itself by bursting the bund. This it did about a year or two ago, carrying away Dr Marfel's house. This house, which was a standing landmark on all old plans, is now no more, and only the ruins of its foundations are to be seen on the river bank.

Nearly all the streets are lined with trees so that, looking at the city from a distance, the impression conceived is of a vast grove of trees, from which the gilded spires of pagodas and tapering points of kyoungs bristle in profusion.

Having given a general description of the city, I now proceed to describe it in detail, and under the following heads—

- | | |
|--|---|
| 1 Streets | (f) Approaches from north and nature of country |
| 2 Houses, bazaars, pagodas, kyoungs, and zavats | (g) Approaches from south and nature of country |
| 3 Canals and backwater and lakes, rivers and bridges | (d) Approaches from east and nature of country |
| 4 Embankment | 8 Materials for obstructing roads |
| 5 Commanding position | 9 Materials for building |
| 6 River bank and anchorages | 10 Plan of attack |
| 7 (a) Approaches from west and nature of country | |

Streets run by each side of each block. These vary from 20 to 34 yards—i.e., from 60 to 100 feet. Some of them are good and well made, but the general run of them are very bad and rough in dry weather, and almost impassable after rain. The Burmese system of repairing roads leaves much to be desired. Each individual house owner living in a street is obliged annually to repair the road in front of his house from near the threshold of his house as far as the centre. Each person having his own ideas regarding road making, it follows that, while one person lays down an elaborate pavement of large round stones (they say this is the most economical method, because as neither carts nor anything else can go fast over it, the wear and tear is less, and consequently it lasts longer), his next-door neighbour fixes up his lot with beaten down clay. Beyond him comes a proprietor who works in brick. After him comes a man who does his repairs in wood. This enterprising citizen gives you a fair specimen of a bad corduroy road over his portion of the street, and as it is often composed of logs of teak 10 or 12 inches in diameter, the traveller rejoices when he has passed it. These different modes of road-making are produced in such variety as to strongly impress the stranger with the native ingenuity of the Burman. The roads are by no means bad for some time after they are made, but after a few days' rain they become very bad.

There is another custom common in Mandalay, which adds considerably to the difficulty of navigating the roads. It is this. In the rainy weather the

people dislike having the ground in front of their houses made into a puddle by carts passing and cutting it up. The carts naturally seek the best part of the roads, which is not the centre, for that is nearly always the worst. They, therefore, seek the side, and as this part is never "repaired," it quickly becomes a deep mire. To prevent this the ingenious Burman scatters a few logs of teak wood in front of his door. It is not easy for a cautious pedestrian to pass these uninjured, and quite impossible for a cart or pony. With this device, freely indulged in by every one who can afford it, and is not too lazy or indifferent to undertake the exertion, it may be imagined how complicated the passage of a street becomes. Such is the condition of the greater part of the roads which depend on municipal repairs. There are two other classes of roads —

- (1) those that were made by the late king and have not been repaired since and
- (2) those that have been simply laid out, and not completed

Of the former, there are four specimens on the west side of the town, one on the east, and two on the south.

The western roads are, counting from the south,—

- A — Road to steamer ghât called Gawain
- B — South ditch road to king's steamers ghât called Zay ju-daw lan
- C — Road past Residency called Thin ju-daw lan
- D — Road from centre gate called Seshen lan

A is the most frequented road in Mandalay. It begins on the river bank close to the custom-house, and passes through the so-called gate in the embankment. Immediately after starting, it crosses over a bund between two swamps (formed in an excavation caused by taking earth for the embankment), and then, leaving a guard-house on the left, passes through the embankment. Another guard-house is then passed on the right, and after proceeding over a hundred yards, it passes along a bund, which here cuts the Theng-za creek. This creek is deep, and varies in width from 80 to 200 yards. Water can be let into it from the Nanda lake. The passage of this could be made very difficult by cutting the bund and having a battery in the garden and pagoda on the left side. This, however, would be commanded from the bund. The road is metalled and fairly good, and over 100 feet wide, 30 or 40 of which are metalled. It crosses the Shway-ta-choung over a substantial bridge, and runs right up to the Kulladan, or foreigner's road.

B *Zay ju-daw lan* comes down to the river bank, where the king's steamers lie. It is a well made road, lined with houses and shops on both sides, and with some kyoungs and timber yards. This road crosses the Theng-za creek over a bund. It is lined with houses, and is well raised, crosses the Shway-ta-choung, and runs right up to the south-west corner of the city ditch, which it runs along. It is 100 feet wide, and metalled in the centre part.

C *Thin ju-daw lan* — This road leaves the south-west gate of the city, and passes the Shway-ta-choung close by the Residency. It then passes to the river bank as a causeway, raised about 6 or 8 feet from the country bordering, the sides being brick walls 3 feet wide at top. It crosses a long bridge, and ends at the Theng-za creek. The creek can be forded here in the dry weather, but when there is much rain it would be too deep.

D *Seshen lan* — This is, as far as it goes, the best road of all. It is 100 feet wide, even and well metalled, and a causeway raised 6 feet all its length south of the Shway-ta-choung. The greater portion here passes

through paddy fields, trees, and pagodas, and it reaches the Theng-za creek at a place where it is very deep and two or three hundred yards wide

There are lateral communications between *A* and *B* both by the river bank

Lateral communications. and to the east of the Theng-za creek On this side there is a nala and some swampy ground that must be passed, and the tracks are only passable in good weather The ground which intervenes is covered with trees, huts, pagodas, and kyonngs About the middle is a bit of slightly elevated ground, which is said always to be above water, even when the surrounding country is flooded At the corner where the Theng za is joined by the nala from the Shway-ta-choung there are a lot of pagodas in a walled enclosure, and east of them another pagoda on an open space of grass East of this are huts, and further east is a brick causeway with side walls about $3\frac{1}{2}$ feet high, which leads from *A* to some kyonngs on *B* road These brick causeways remind one of the paved Chinese roads, which are, according to the Chinese, good for ten years and bad for ten thousand They may have been good for a few short years, but they will always be bad now till others are made over them

Between this causeway and the Shway-ta-choung is a dense mass of huts and kyonngs embedded in trees, and to the south west end of causeway is the locality known as 'bamboo square,' where dwell the members of the demi monde

The bridge across the chung on *A* road is the best in Mandalay, being level with the road and more permanent than any others It is covered with earth and metal.

The bridge at *B* is also good, but it is arched, and the approaches are apt to get out of repair

Between the two roads the chung is crossed by four other bridges, but only two of these are fit for ponies to cross

East of the Shway ta-choung five streets communicate with *A* and *B*, and this part is densely populated and covered with houses

There is no lateral communication between *B* and *C* roads west of the chung
Communications between *B* and *C* Shway-ta-choung, except along the bund of the chung This is, however, liable to interruptions, as there is a lock in it near *B* East of the chung they are joined by four roads

The ground which lies between *B* and *C*, west of the Shway-ta-choung, is to a great extent swamp and deep water, and is impassable at all times of the year There is a small pathway and bridge across the lower part of this, but it cannot be relied on as a permanent-way, and would be very easily destroyed The British Residency is on the south side of this road on the bank of the Shway ta-choung

Between *C* and *D* there is only one road along the bank of the Theng za
Communications between *C* and *D* creek, and another along the bund of the chung

The country between is low, and a great part occupied by paddy land, which in wet weather is a swamp There are many kyonngs and trees about the western end The centre part is open paddy land, and the east, kyonngs and trees East of the Shway-ta-choung four roads join them, and this part is well populated

North of *D* road there is nothing but open country, the nature of which can be seen from the map It is chiefly paddy fields, with many patches of swamp and many ruined pagodas There is a strip of land running from *D* along the east side

of the Theng-ma creek, which is slightly elevated, and along which lies a road which communicates with the village of Lune-thun. This road is not more than a cart track. This ground is quite impracticable for troops. East of the Shway-ta-choung the ground to the north is laid out as usual in blocks, but it is very thinly inhabited, and many blocks have only a few huts, and the inner space open grass land.

The roads just described are those running east and west. There are others crossing them and running north and south, but they are all east of the Shway-ta-choung.

The first of these (*F*) is a fine broad road running along the west of the city and extending south as far as the canal. This is 15 blocks or 2,700 yards. It does not go beyond the canal. This is a good road.

F Anan-Chyoon-dallan.

West of it is a road fairly good, which runs from near the north road of the ditch to the canal, which it crosses, and then joins the causeway of brick that runs past the Arakan pagoda and on to Amarapura and Ava.

The third road runs parallel, and is also fairly good. It passes the canal and leads to some monasteries.

The fourth is called Kulladan, 'or foreigner's road'. It is broad and fairly good, but in many places forcibly illustrates what has been previously said about Burmese road-making.

This road commences at *D* road, and runs south for 19 blocks or 3,420 yards, where it ends in a large kyong and pagoda.

The next is the Amarapura road. It runs in a nearly straight line right out to the old city. It is tolerably good the whole way and wide.

Between this road and the Shway-ta-choung the number of streets varies with the width of the ground from two to three. They are smaller than the other streets and not so good.

The above mentioned streets and roads are the best in Mandalay. All streets on south side of the others are quite kutcha.

The roads on the south of the city from the *F* road to the centre gate road are all very bad, and for the most part quite impassable for wheeled traffic, except in the dry weather. The ground here is low and swampy, and the water lies in pools all about.

The first two streets east of *F* road extend as far as the canal. The street east of this ends in swamp, and seems to prolong itself in a deep muddy ditch, and it takes a pony all he knows to flounder through it.

From the third street east of *F* road up to the centre gate road (marked *H* on map) the streets only go south for 7 to 9 blocks. They are very bad. At the end of every block where there should have been a drain there is in its place a nasty mud hole of most tenacious mud. To the east of *H* road, and right up to the kyongs under the eastern embankment, the streets extend only 3 blocks south, beyond which is paddy land as far as and beyond the canal. All these streets or roads are after rain a mass of mud, which takes a long time to dry, and when dry this mud becomes as hard as brick and onto the pony's feet. The paddy fields south of these roads are quite impassable after rain. I crossed them six weeks after it had rained, and had the greatest difficulty in floundering through mud up to the pony's girths.

The east road of the city near the ditch is the best, and this is very bad. It was mostly mud in December and towards the end of January. Beyond this a few streets run parallel north and south, but the ground is very wet and swampy. There is one broad metalled road which runs from the centre east gate to the other side of the lake.

There are no side roads of importance, and the ground is low and swampy. The place is chiefly occupied by kyoungs, gardens, and huts. The centre road is 100 feet broad and metalled, and stretches across the lake, which is close on two miles wide.

On the north side several roads start from the city ditch road, but few of them get far. The centre one goes straight to a royal garden and kyoung. The Bhamo road is three blocks further west, and is a reasonably good road, but unmetalled. It goes straight to the embankment, and then crossing the canal goes on a short distance. It then crosses the Shway-ta-choung, and goes along the western bank of it to Madeya-myo, and I was told as far as Bhamo. There is a marshy place it crosses on the south side of the bund that would be very nasty to pass if the road was broken here. The part of the road along the bund of the Shway-ta-choung is excessively bad. There is hardly room for two country carts to pass. The Shway-ta-choung is fordable in most parts, but is very muddy.

One only of the streets west of this extends three or four blocks, when the houses cease. On this side of the city there are but few houses, and these are chiefly occupied by palace servants. The first block along the ditch road is the only one that can be said to be fairly inhabited, and beyond that to the north the blocks are for the most part open land, with a few huts scattered along the edge. Beyond this are some pagodas and paddy fields. Between the north-east end of the city and the hill are a large quantity of kyoungs and zayats. They are built mostly of teak wood, and some of them are superbly curved and profusely gilded. There are also some masonry pagodas walled in.

The houses of Mandalay are for the most part wood and mat. They are invariably raised off the ground on posts from 4 to 10 feet. This undoubtedly conduces to health in a place like Burma, where sanitary arrangements are not strictly attended to, and where no attempt is made to drain off the water that falls.

By far the greater number of huts are constructed for the most part of bamboo mats, and very often entirely of bamboo. The houses of the well-to-do natives are of teak, with sometimes wooden walls, but oftener of mat. Very few Burmans venture to show their easy circumstances by any display of comfort in their dwellings, as it would attract the notice of the authorities, who are always ready to "borrow" from the wealthy.

The brick houses are nearly all the property of foreigners. There are very few in proportion to the number of others. They are shown on the map by solid black blocks, while the wood and bamboo houses are indicated by shaded blocks. Most of the brick houses are in the Kulladan or 'foreigner's road,' and the greater part of them belong to Mogul merchants and shopkeepers. Some of these have fine large houses and shops. They are pretty substantially built, and have invariably iron bars and iron shutters to the windows. The iron shutters are more as a protection against fire than burglars.

Along the Kulladan nearly as far as the steamer road *A* both sides of the streets are nearly continuously lined with brick houses. Many of these are two-storied.

The Chinese quarter has also many brick buildings, and there are many pagodas, mosques, and kyonngs with walled enclosures. On the north-east and south-east sides there are hardly any brick houses, although on the north and east sides there are many pagodas and kyonngs in walled enclosures. Those about the foot of the hill would afford the best accommodation, as they are on elevated ground and dry, while those near the road are on a lower level than the ditch, and consequently always damp, and for a great part of the year in a swamp.

The principal pagoda in Mandalay is called the Arakan pagoda, because there is a large brass image of Gandama, which was brought from Arakan by one of the kings. It is a magnificent building and profusely gilded. It is situated on the road to Amarapoora, about 3 miles from the palace. There are many pagodas, kyonngs, and zayats all about it. South of it is a large walled kyonng, the plan of which is attached. There are several other walled pagodas and kyonngs on the road between Mandalay and Amarapoora, and these if fortified would form a serious obstacle to an advance from Amarapoora.

North-east of the city is a large mass of buildings about 400 yards square. In the centre is a pagoda with a gilt dome, around which are many small temples, and round the outer edge is a line of zayats, all in white chunam.

Next to this is another kyonng built by the present queen, and about the same size. The centre building is an oblong pyramid with belts of French grey contrasting with the white.

Further to the south for three or four miles are kyonngs and pagodas, and beyond them grass and jungle. At the west end of the Residency road *B* there are a large number of tombs, and in some cases around them are built zayats. This is one of the burial places of the city.

There is one large bazaar in Mandalay. It is built of brick, and occupies nearly two blocks of ground. It is partly roofed in, and is divided inside into various small booths or shops, where the merchants keep their goods and carry on business. This bazaar would, if cleared out, be a good place for barracks, but it would be necessary to occupy some of the houses in the vicinity to avoid its being commanded. It is situated at the corner of *B* road and the Shway-ta-choung. Between it and the road are some good shops, belonging principally to Moguls. There is only one pukka bazaar, all the others are temporary. To the north-west of the city in *F* road is a fruit and vegetable bazaar.

The king's bazaar brings a yearly income of Rs 2,40,000. It was very much deserted when I was there, as the lotteries had taken away nearly all the shopkeepers.

The zayats in and about Mandalay and on the road to Amarapoora are innumerable. Those about the hill are the best.

There is a regular system of canals in Mandalay, the water being supplied from the Nanda lake and the Aung-pin-lay. A glance at the map will show them. On the east a canal runs the length of the embankment, and is connected with the lake by a canal running east and west from the Nanda lake to the Shway-ta-choung.

The canal to east is about 250 feet wide and seems deep. It is crossed by a fine substantial teak bridge 15 feet wide. It is to be observed that this bridge is not opposite the entrance of the bund, which is at the end of the road, but to the north of it. I have only seen one bridge across this canal, and I have not heard that there are any others.

The canal on the north side of the embankment runs, as before stated, into the Shway-ta-choung. It is about 50 feet wide and 10 deep, and is bunded across in many places. There was no water in the western end of this when I crossed it in December and January.

The Shway-ta-choung is a branch of the Madeya river, which flows south. It passes through 12 miles of paddy land before reaching Mandalay, and is here more like a canal than a stream. It varies in width from 80 to 150 feet, and is fordable in many places. On the western side is a bund about 10 feet above the water level and about 20 feet broad on the top, except in some places where it is damaged.

The Shway-ta-choung flows in a slightly winding manner along the west of Mandalay, joins the Theng za creek a little south of the south canal, and, finally passing through the embankment near Ava, flows through the sandbank, and empties into the Irrawaddy near the 'Ja-jay-wa choung. This choung is bridged over at nearly every good street. In the dry weather it is bunded across in many places to keep the water deep enough.

The southern canal flows into the Shway-ta-choung at the fifteenth block from the city ditch. It flows from the east canal, and increases in depth as it goes west. It is 20 to 30 yards wide, and the banks from 20 to 30 feet deep. There was no water at the western end, and a mile to east there was only a little in December and January. There are seven wooden bridges across the canal—some of them good and wide—all of teak.

Two small canals connect the city ditch with the waters of the Aung-pin-lay, so that fresh water can be let in at any time. All the royal gardens are connected with some canal, and thus a plentiful supply of water is always available.

The Theng-za creek may now be considered as a backwater. It formerly was one of the creeks formed by the numerous sandbanks and islands which here fill the river, but when the embankment was built, it was included in the area enclosed. It lies, as will be seen from the map, irregularly between the north and south embankments, it is generally deep, and is only bridged in one place—south of A road. It is bunded across in three places. It varies in width from 80 to 200 yards. It is generally deep, and I only know of one place where it is fordable, and that is opposite B road. The Theng za creek joins the Shway-ta-choung as before stated, and falls into the Irrawaddy near the Ta-jay-wa creek.

There are two places where the Theng za creek most nearly approaches the Irrawaddy, and is only separated from its old channel by the embankment. It would only be necessary to cut these to open up the old channel and admit steamers as far as the foot of C road. One of these places is opposite C, and the other south of B road.

The Nanda lake lies to the north-east of Mandalay hill, and is a continuation of the Aung-pin-lay, but banded off from it
 Nanda lake. This lake stretches some two or three miles to the north, and is about the same width. A bund, on which is a bad road, is on its western side, and the northern end is not clearly defined. The lake is said to be deep and to contain water at all seasons.

South of it is the Aung-pin-lay, which stretches south until its end is close to the Amarapoora lake. In the rains these form one large expanse of water, and even when I saw them in December and January the northern lakes were joined, and I was told the two southern ones also. The Aung-pin-lay is about 2 miles wide, and appears to be to a great extent marsh. What appear to be bunds, almost on a level with the water and marsh, cross the lake at intervals of half or one mile. A good road crosses from the centre gate of the city, which from the gate up to the edge of the lake is the best road in the whole of Mandalay. The eastern side of the lake is the deepest and clearest, and before reaching it a bridge has to be passed. These two bridges, one at each side of the lake, are the only means by which the water passes from one to another. The water of these lakes is considerably higher than the city of Mandalay, and still higher than the country lying to the north, south, and west, so that all this country could be easily flooded at any time, and if kept under water for a few days, there would not be much getting about on it.

If an attempt were made to flood the country in the dry weather, the following measures should be taken to render the attempt abortive. The embankment should be cut on the west side near *C* and *B* roads at the places indicated, so as to allow the Theng-za creek to drain into the river. On the south side the embankment should be breached near the north-west corner of Amarapoora city, and the Shway-ta-choung should be broken in several places so as to get rid of the waters quickly. I would also breach the choung to the north of the bund. Thus the waters being able to run out more quickly than they entered, the waters from the lakes would not much interfere with any operations.

All the bridges in Mandalay are of teak wood. They are generally very strongly built of solid teak posts and planked over.

Bridges. Those on the main roads are all strong enough for the passage of siege artillery.

The centre part of the bridge is generally covered with long loose planks, which could be easily removed, thus leaving a wide gap in the middle.

The best bridges are, first, that over the Shway-ta-choung on *A* road. This is an exception to the general run of bridges, and is built on a level with the road on strong teakwood piles. After being planked it is covered with clay and metalled. The canal on both sides of this is shallow. The bridge which crosses the Shway-ta-choung north of this is also fit for cart traffic. The only others fit for carts are those crossing at *B*, *C*, and *D* roads. There is only one bridge to the north. The canal is banded in other places where the road crosses it.

On the east there are two cart bridges across canals running from ditch to eastern canal, and two foot-bridges. There are also substantial bridges across the eastern canal and at both ends of the lake road. There are more substantial bridges across the ditch, one in the centre of north, east and south faces, and two in the west face. That is, one in the centre of the face, and another half-way between the centre and southern corner.

These bridges are constructed with the ends of masonry and the centre part of wood. They are about 30 feet wide, and quite unprotected. The idea of having the centre portion of wood is evidently that it may be removed at a moment's notice in case the place were besieged. The bridges crossing the southern canal are not good, and only one is fit for carts. Most of the bridges are in bad repair, but they have one great advantage over the wooden bridges constructed in British Burma, and that is, that they at least begin by being good. They are in the first instance invariably built of the best materials and in the most substantial manner, while in British Burma they are often built of inferior material, which is soaked in tar to make up for its inferior quality, and no surplus strength appears to be given. The Burmans seldom repair anything, and it is only where a bridge is so bad as seriously to inconvenience people, that something is done to repair or replace it.

The Mandalay embankment was constructed by the late king, partly to keep out the waters of the Irrawaddy, and partly for defensive purposes.

Embankment. It extends entirely round the city and suburbs of Mandalay, measuring east and west $4\frac{1}{2}$ miles and north and south $7\frac{1}{2}$, and embracing an area of $32\frac{1}{2}$ square miles. The perimeter is $28\frac{1}{2}$ miles.

From the point where the Bhamo road passes the embankment on the north round by the western face and up the southern face at the end of Amarapoora is over ten miles, or 17,600 yards. It would require more soldiers to man this line than there are in the whole kingdom.

The river side is constructed in many places like a rampart, and at some of the angles it is revetted both exteriorly and interiorly with brick.

The section at these places is shown in map. About 50 yards of the salient corner is raised 8 or 10 feet higher than the rest of the wall, and looks like a hollow ravelin. It was evidently intended to mount guns in these places, as the terreplein is of sufficient width and the parapet is revetted. There are, however, no embrasures, and the ground has been eaten into by the rains till it is entirely rotten.

The west face advances in direct echelon from the south centre (the south end being refused), the flanks being connected. This tracing affords a certain amount of flank defence. None of these places are prepared for guns, nor would they be strong enough to carry them. The embankment of Mandalay seems quite useless as a line of defence, and, on the other hand, it would prove most useful to an attacking force, which could take possession of it from the south west corner, and then disembark the troops in perfect security.

There is a road along the greater part of the embankment, but it is in places very bad.

The embankment is revetted for about four feet from the ground. Beyond this it presents a rough appearance in most places, and there is no place where a man cannot walk over it, and many where a pony may climb up it.

The places where this bond could be broken most easily and an advance by it obstructed most effectually would be—

- 1st on the north side where it crosses the Theng sa creek and
- 2nd, on the south side, opposite to Amarapoora.

I do not, however, think the Burmans would themselves breach it in these places, as by doing so they would let the water escape from the creek and from the Shway-ta-choung, and so considerably weaken their defence. There is only one part of the embankment about which I am not sure, and that is

the south-east corner I was informed by Burmans that this was continued the whole way round, but whether it is there or not is a matter of not very much importance, as from the nature of the ground and the water that lies on the Amarapoora and south-east side any advance from that direction would be impossible.

The general height of the embankment is about 20 feet, and it is 60 feet wide on the top.

There are from one to two gateways in every face, but these are simple holes in the bund, and there is no attempt at a gateway or gate. There are parts of this over which it is forbidden to walk, and many an unwary stranger, who ignorant of this prohibition has gone for a stroll on this pleasant bund, has rested in the neighbouring stocks for 8 or 10 hours afterwards. I have ridden over a great part of this bund, but I was well mounted and never stopped to answer questions. As far as I saw, there is no part of it over which troops could not march.

I believe this embankment answers the purpose of keeping the river floods out of the town fairly well, but as there are no sluices, there is always a danger of the water collecting inside and bursting through. Such an instance occurred a couple of years ago, when the bank near C road burst and carried away Dr Marfel's house.

The only commanding position near Mandalay is the hill to the north-

Mandalay hill. east of the city known as Mandalay hill. It is nearly a mile long from the base south to north, and

about 500 feet higher than the road to west of city.

It is of rocky formation, but the greater part of it is covered with jungle, chiefly small trees. The formation of it may be seen from the map.

There are two flights of steps leading to the top,—one on the south-west spur, and another on the west nearly under the extreme point. The south-west stair leads directly to Gaudama's temple, where stands a colossal figure of the Buddha pointing with his outstretched hand to the city. From this point the city could be conveniently shelled.

The spur to the south-west is also accessible to mountain guns, but with difficulty.

The eastern side is steep all along, and the western side between the spurs is also steep. The western approach is more easily reached from the embankment, and there is a path round the hill by which a small party could reach the pagoda at the top. It winds round the north of the hill, and ascends close to the east side of the pagoda. It is a narrow path through high bushes, and an advance along it would be under cover, until the north of the hill immediately under the pagoda is reached. The path is here open for the rest of the way, and after passing about 100 yards of open, turns to the south, and there is here a steep ascent to the pagoda.

There is only one entrance to this from the south, which is by some steps about 6 feet high. There is a wall four feet high all round it.

To the north of the western steps is a spur running out to the west. On this is a flat space about 50 or 60 yards* square, and farther west it rises a little, and is crowned with a small pagoda. This open space would be a good position from which to shell the city. The approach to it is easy, and it is not a place from which the Burmans would be likely to apprehend an attack. There are monasteries and pagodas all about here, which would give plenty of shelter.

* Marked A on map.

The approach to Mandalay hill from the south is as follows. On reaching the north-east corner of the city ditch, the road to the foot of the hill has straight in front, the intervening distance being about two or three hundred yards. The road after traversing this distance (during which an open

From Gaudama's temple to top of hill.

space, with the large buildings erected by the king and queen, is passed on east, and on the west some fine kyonngs and pagodas) turns to the west, and gradually ascends some 40 feet, when some zayats and kyonngs under the shelter of some fine trees are reached. This is close to the foot of the stairs. These are precisely the same as the one to the west, a photograph of which is given. The steps are made of blocks of stone, and there is a flat space of varying length, according to the incline, between every few steps. The steps terminate at the temple of Gaudama. Leaving this and proceeding to the north, the path inclines upwards very slightly, and lies on the top of the ridge for 80 yards. A few steps are now ascended, and a further length of almost flat path traversed for 120 yards. Twenty-five yards further on to the right of path is a tank cut out of the solid rock. There was some water covered with green unwholesome-looking scum. This is rain water, and not a spring.

The reservoir is 25 yards long and 12 wide, and is surrounded by a parapet. Up to this point the path has slightly inclined to the west, and continues to do so for the next 54 yards. From thence it ascends at an angle of 25° , increasing in some places to 30° for the next 90 yards. A still steeper ascent now follows for 85 yards, when the pagoda at the top of hill is reached.

This is on a flat some 70 yards long by 30 or 40 wide. The sides on east and west are precipitous, and on north it is pretty steep. There is a small path down the east side, and then turning round the north to the west. Below this path a spur stretches out nearly north.

Following the pathway just mentioned after it turns to west, you pass through jungle, and presently it leads to a small pagoda and a rock cut reservoir. These block up the path, and there is only just room to scramble down between the tank and pagoda. Then you reach the small plateau before mentioned, about a mile distant from the city, of which a good view is obtained.

There are many kyonngs and pagodas and zayats on the hill, and there are some good wells, particularly near Gaudama's pagoda.

Besides the Mandalay hill, there are only two or three small mounds about 20 feet high. One of these is at the foot of the hill and between it and the city. There is another mound at the north-west corner of the ditch and just across the road. Guns mounted here would be on the same level as the top of the wall. With the exception of these, the whole country is flat from the Shan hills to the Sagang hills, and from Madeya river to below Ava, excepting the hill of Shway-jay-yet.

The bank of the river at Mandalay runs nearly north and south. It was in December about 40 feet above the water level and composed of clay. That near the water's edge is soft and sticky, but higher up it is firm. The custom-house is situated a little south of A road, and opposite it is the anchorage for the Flotilla Company's steamers. There is plenty of water here, for they lie so close up to the bank that only a plank is necessary to land.

To the north of their berth come the king's gunboats, so called. They occupy some hundreds of yards, and to their north are a lot of native boats, and further on the king's river steamers, which lie opposite *B* road. Above them the river is covered with native boats as far as the choung, which runs along north. Opposite *D* road a large sandbank stretches away to west, and turns the channel in that direction. The choung is crowded with boats of all sorts and sizes, from the royal barge down to the smallest canoe. The distance between the water's edge and the embankment varies. At the part where the choung enters, it is perhaps 200 yards, and in other parts it is within one hundred. In former days the bank was very pretty, being lined with green trees and covered with grass, but in making the embankment, large unsightly and irregular holes were made, where the earth was taken out, and these fill with rain and form swamps. South of the Flotilla Company's anchorage the channel runs south for about a mile, taking a slight turn to the west, and then continuing south until near the end of the embankment, when it turns to south-west and continues so until nearly opposite the Ta-jay-wa-choung, when it turns west and then south, and then bending west passes close by the mouth of the choung, and then goes on to Sagaing nearly due west.

The landing all along is quite easy in the dry season, but I should think that in the floods it would be difficult to find ground to form up the troops on, as the water often comes right up to the embankment.

Mandalay may be approached from two sides,—
the south and west

From Amarapoora there are three roads leading to Mandalay,—one between the city and river, one through the centre of the city, and the third by the north of the city.

Southern approaches.

The first of these crosses the ditch and embankment at the north-west corner of Amarapoora, and for some distance takes a direction half east of north. On the western side are fields of sesamum and paddy, and to the east, trees and bushes. About 500 yards from Amarapoora there is a large kyoung on the eastern side enclosed in a wall about 6 feet high and 100 yards square, around it are trees. West of the cultivation is water and swamp.

The road here is 20 or 30 feet wide and capable of being extended. It is not metalled, and would be very soft in rain, if not entirely under water. Beyond the kyoung for the next 800 yards the country to east is thickly wooded, with huts at intervals and some patches of cultivation. On the west there is a strip of cultivation between the road and the swamp. Along the edge of this is a cart track which joins the other road at 800 yards from the kyoung. A road here branches off to join the centre road on the east. The country to east is covered with large trees and huts. To west within 50 yards of the road is the swamp caused by the overflowing waters of the Theng-za creek and the Shway-ta-choung.

One thousand yards further on the Phadoya pagoda is passed on the right. It is surrounded with a wall 200 × 200 yards and 5 or 6 feet high. There are many fine trees all about here, and on the western side is the same swamp. In the middle of it is a stream of clear water, it is alive with duck, teal, and other waterfowl.

Continuing onwards, the road recedes from the jheel, and the intervening space is cultivated. Eight hundred yards further on a branch road leads to the eastern road. The country on both sides of road as before, except that there are more huts. The road here is a fair weather road, and would not be

worth much in the rains, as it is of clay. A short distance further on to the east side is a pagoda in a clump of trees.

Four hundred and fifty yards further on a large pagoda is reached on the east side. To the east of road along this part are huts and trees, to the west cultivation for some distance, and beyond it the Shway-ta-choung.

The road turns to the east round the north side of the pagoda, and then to the north, where it enters the main Ava road. This is broad and straight, and near the pagoda are many shops of Chinese merchants. In this spot there is a regular cluster of pagodas and kyoungs. These cover a space nearly one thousand yards from west to east and a mile from north to south.

If these were fortified and armed, they would prove a formidable obstacle to an advance on Mandalay from Amarapoora, especially in the rains, when the country east and west of them is impassable. The road between the large pagoda, marked in map "white pagoda," and canal is fair in dry weather and 100 feet wide. It is very rough in some parts, and in wet weather would be very bad. Both sides are lined with huts, and there are no brick buildings, except near the pagodas. The distance between the white pagoda and canal is nearly one thousand yards. It is likely that the canal would be a second line of defence, and that the bridges would be broken. In this case an advance across the open ground south of A road would turn the flank of any defence on this line.

From the canal any route can be taken to the city, but the best is to continue straight on till B road is reached, and thus turn E, when the south-west corner of the city is only three blocks distant.

The second or central route from Amarapoora is decidedly the best. It is over higher ground, and the road is better and wider.

It leaves Amarapoora near the centre of the wall, and is bounded on both sides as follows. For the first 700 yards it runs nearly north. The ground on both sides for about 50 or 60 yards is open, and beyond are trees and dry cultivation. A police station is passed on the west side about 200 yards from the bund. At 700 there is a walled kyoung about 100 yards square to west, and to the east a lane leading to the eastern road. North of this lane there is a bazaar on each side of the road. The road so far is good and broad.

Beyond the bazaar on both sides are trees and huts, and on the east side further on is a large kyoung.

The road continues north for about 400 yards further, and then turns nearly north-east for 800 yards. There is a village here on both sides, where brass-founders live. Brass images of every size—bells and gongs—are manufactured here. The village extends a considerable distance to the east and west, and is very dirty. Lanes branch off to east and west at intervals. At the end of this stretch of 800 yards the direction changes to nearly north. Here the ground is open on both sides of the road, and there is camping ground for a small body of men. A lane runs to the south-east, which passes through the brass-founders' village, and thence on to the east road. Beyond, the country to east and west is well covered with trees, patches of cultivation, and huts. The road is fairly good. The centre part is not more than 20 feet wide, the total width being about 100 feet.

There is a well at the west side of road, and also at the corner, where the last change of direction took place.

The road now continues north with a little east. At 300 yards lanes branch off to east and west, and on the left of the road is a zayat and a well. Two

hundred yards further on the road narrows, but could be easily widened by removing the hedge on the east side. There is another zayat here on the west side.

Four hundred yards further on is a walled pagoda on west side, the ground between that and the zayat is occupied by huts well sheltered with trees. The eastern side is scrub jungle for a short distance, and beyond it is dry cultivation.

Two hundred yards beyond the pagoda and on the west side of the road is another zayat. There are fine trees near it. On the east, a little distance from the road, are bushes, and beyond dry cultivation, trees, and kyoungs.

The road is now bricked for about 300 yards. On the west are zayats in a thick grove of trees, and to east scrub jungle, beyond which is a kyoung.

The Nazoo-thai kyoung is now reached on east. This is a walled kyoung 200 x 150 yards. On the west side are huts and trees. After passing the kyoung a small, rather deep, nala runs across the road. A narrow bridge spans this. It is in bad repair, and only broad enough for one cart to pass at a time.

The Oobwa pagoda is now passed on the east some distance from the road. On the west are huts and trees. North of the Oobwa pagoda is a kyoung, east of which is a tank and fine trees. To the north of them is a lane, which joins the brick causeway to east. A lane also runs to west.

North of these lanes on the east is the large kyoung of Athau kama, about 200 x 300 yards square, the wall about 8 feet high. On the west of the road are marble cutters' huts. Proceeding north, we pass the white pagoda to west and the Arakan pagoda to east. This is about 50 yards distant from the Athau kama kyoung. Passing the white pagoda, the road joins the one already described.

The road just described is the best one for troops between the two cities. It is bad and narrow in places, but the average width may be taken at 40 feet. It is not metalled, but there are plenty of ruined pagodas about that would furnish metal in abundance.

The third route from Amarapoora to Ava is by the brick causeway which runs from the Arakan pagoda to the north-eastern gate, Amarapoora.

It leaves Amarapoora by the gateway at the north east corner, and for the first six or seven hundred yards runs nearly due north. On the east are a cluster of pagodas and kyoungs. The country is well wooded with fine trees, and dry cultivation appears at intervals. On the west are trees, huts, and dry cultivation.

The road now inclines a little to east for 300 yards, the country on both sides as before. From thence it goes nearly due north to the Arakan pagoda. Trees and huts, patches of dry cultivation, kyoungs and pagodas, are scattered about on either side. The road is made of bricks set on edge, about 20 or 30 feet wide, and for the most part in tolerable repair. There are, however, places where the brick work has been broken through, and these are very bad and difficult to pass. They could, however, be easily repaired by being bridged over with logs. This road is not open for cart traffic, nor do I think ponies are allowed on it, as I never met any one riding there. There is a parapet wall the whole way about 4 feet high.

This road would be useful for conveying artillery along, as it is not affected by the rains. The country to the east is tolerably open, except near Amarapoora, and the three routes being used, it would only be necessary to look after the right flank to the east.

The road ends at the Arakan pagoda. This cluster of pagodas and kyoungs would be a capital place to occupy in case it became necessary to halt for the night, but, unless the opposition was very great, this necessity would not be likely to occur.

The country south of Mandalay may be considered as that included between the southern canal and the southern embankment, including that portion of waste land west of the Shway-ta-choung which would be included by prolonging the canal till it reached the western embankment.

Between the west embankment and the marsh along the margin of the Theng-za creek are trees, open land partly cultivated, and partly brick fields, kyoungs and many small villages. All along the inside of the embankment the trees and vegetation seem pretty thick. In the wet weather this ground is said to be impassable.

Between the Theng-za creek and the brick causeway running between Mandalay and Amarapura there are the two roads already described, and between them the ground is occupied by huts, kyoungs, pagodas, trees, and patches of dry cultivation.

East of the causeway there are a lot of pagodas and kyoungs scattered about, and then right away east is open cultivation. The land here is quite flat and a sticky clay, which a few showers of rain render quite impassable.

East of the bund and canal there are said to be a lot of kyoungs and pagodas, gardens and cultivation. I only saw this portion from a distance, and therefore cannot with certainty say any thing about it. I was stopped by the mud when I tried to reach it in December. From what I saw I am satisfied that Mandalay could not be approached from that direction, except perhaps in the very driest weather, and then with great difficulty.

There are four main approaches and two minor approaches from west and from the west.
Country to west.

The main approaches are—

A road		C road.
B road		D road.

The minor approaches are across the open land south of A road, and by north embankment.

This road starts from the steamer ghât, and runs east as far as H road, where it ends in a broad muddy ditch. It crosses a marshy spot west of the embankment over a bund, and then passes through the gap of embankment. From this point to the Theng za creek is about 250 yards. On the southern side are thick trees and bamboo-and-mat huts. There is a Burmese guard here, and another outside the embankment. Where the road touches the creek, there is a cluster of huts on a piece of ground slightly elevated. This is covered with plantain trees.

On the north side there are a few plantain trees. The road crosses the creek over a bund. In December this was only a foot above the water.

On the east side of the creek and north of the road there are a lot of pagodas. The edge of the water is fringed with plantain trees. A battery placed here would perhaps give trouble, but could be easily silenced by sharpshooters from the embankment. Between the Theng za creek and the Shway-ta-choung the road is lined on both sides with plantain gardens. About half-way on the south side is a timber yard.

A small stream runs along the north side of the road. It comes from the Shway-ta-choung and runs into the creek. The country on both sides could be cleared without difficulty and in a very short time. Near the Shway-ta-choung there are some kyoungs to the south of road, one large one being of masonry. On the north corner is a royal garden, in which is a building of some size. Most of these gardens belong to Chinamen.

The road crosses the Shway-ta-choung over a strong teakwood bridge, and continues straight to east, cutting *E* and *F* roads. All the houses are wooden.

From the bridge the city can be reached by many side roads, but the *E* or *F* is the best.

There is communication between *A* and *B* roads by the river bank, by the bund, by east of Theng-za creek, by brick causeway, by bund of canal.

The *A* road is from 60 to 100 feet wide, but only 80 feet of the centre are metalled. *B* road runs from the king's steamer ghât up to the south-west corner of the city. Between the river and the embankment is a space of about 200 yards. On the south side are the ruins of Dr Marfel's house, and near the embankment a mill (cotton or silk), on the north side trees and huts. Passing the embankment, there is a space of about 200 yards between it and the Theng-za creek. There is a considerable space open near the embankment, and beyond it to the east the space is lined with huts. There are also a lot of huts and timber yards to the north side of the road and bordering the creek.

A bund and bridge crosses about 50 yards of water. Then the road passes over about 80 yards of land, and then over 100 yards of water. These bunds could very easily be destroyed. The second piece of water crossed stretches out on both sides about 100 yards to north and 200 to south, and all around is crowded with huts.

About 100 yards after crossing, there is a timber yard to north side. From this spot up to the Shway-ta-choung both sides are lined with wooden houses and kyoungs. A little more than half-way there is a large walled kyoung to south of road, and nearly opposite a large timber yard. East of this yard a road runs north to a backwater, where a large quantity of teak logs are lying. North of this are huts.

A good strong teakwood bridge about 20 feet wide crosses the choung. On the south of road is the king's bazaar, to north an ordinary bazaar, and further on and still on the south side are some large pukka shops belonging to Mogul merchants. Two blocks from canal is *E* or Kulladan road, and three further on is *F*. There are some brick houses to north of road.

This road is very good. It is one of the 100 feet roads, and has about 80 or 40 feet in the centre metalled. It could be seriously obstructed in the three places where it crosses water, but there is plenty of material close by for making bridges, *vis*, the posts and planks of the huts, which are thick here, and logs of wood from the river bank or the timber yards.

The Theng-za creek is not banded across in this place, but the water is not very deep—about 3 feet. I saw carts cross it in January.

From the embankment to the water, about 100 yards, is a fair road. On the other side is a masonry construction like a landing quay, behind which are some buildings, formerly mills. This road is a raised causeway contained between two solid brick walls, 6 or

8 feet above the surrounding country. At the lower end near the creek are a number of tombs, sayats, and kyonngs. These are sheltered by a grove of fine trees, which extends on both sides as far as the bridge. This bridge is about 200 yards long and spans a piece of swamp. It is solidly made of teak logs, but the upper planking is defective in many places.

There are two more bridges between this and the chongng. The country to north is open and occupied near the chongng by kyonngs, and to the south by Dr Marks' school and the British residency. East of the chongng it leads to the south west gate of the city, the distance being about 850 yards. Between the long bridge and the Shway-ta-chongng there are two other bridges, both close together and nearly opposite Dr Marks' school. These bridges are all more or less out of repair, and would not stand any continuous traffic. They are 15 or 20 feet wide.

The road is raised 8 or 10 feet above the bordering country, and is revetted with a strong brick wall 3 feet thick on both sides. It is metalled and in good condition. A road runs alongside the foot of the bridge, which is, however, under water in the rains, and very bad when above water. This road cannot be relied on as a line of advance, as the repair of it would entail much labour and time. It is about 80 feet wide.

East of the Shway-ta-chongng the road continues good up to the ditch. The bridge across the chongng here is of masonry at both ends, having the middle part of wood.

This is the best road of the whole lot, but it has the disadvantage of not being connected with the river bank. The Theng-za creek is at this place very broad and deep. A

D road.

Burman told me it was 15 cubits deep, or 22 feet.

This road is 100 feet wide, and is a raised causeway, with both sides revetted with brick. It is metalled and in good order from the Theng-za up to the city. It leads to the centre gate of the city.

The greater part of country through which it passes is quite open. Near the Theng-za creek there are some trees and kyonngs on both sides, but they are below the level of the road. There is one bridge on this road, and it would not be easily destroyed or obstructed.

For about 500 or 600 yards from the Theng-za creek there are trees on both sides of the road. Then for 400 or 500 yards is open paddy land. On the south side this extends as far as C road, the southern part being marsh and water. To the north the open country extends as far as the embankment. Further east are a few huts and kyonngs on both sides up to the Shway-ta-chongng. There is a good strong bridge across the chongng here. From this bridge to the city is only a little more than three blocks, and there are only wooden houses on either side.

Near the Theng-za creek a lane goes to the south and joins C road, it would be very muddy in rainy weather. A lane also goes to the north to the village of Line-thin. The minor approaches are north and south of those just described.

Northern road along bund. The northern one is by the embankment, and leads to the north of Mandalay.

There is a road all along the top of the embankment from opposite D road right away to the Shway-ta-chongng from 9 to 18 feet wide. Going north, there is a road between the embankment and the creek as far as the northern portion. The lower road is now on the northern side of the embankment,

and is little more than a track that runs over the ground between the embankment and the swamp, and which varies in width from 50 to 100 yards. This extends up to the Shway-ta-choung, but in the rains it is, with the rest of the country to the north, under water. The Shway-ta-choung is fordable, at the point where the embankment meets it, and there is a village on the opposite side, the houses of which would furnish material sufficient to bridge it over.

The country to be described lies between the Shway-ta-choung and the embankment (west face) and the *A* road and north face of embankment.

Between the *A* and *B* road, a distance of nearly 1,600 yards, the country is thickly covered with huts and kyounge in some places, while in others, as north of the *A* road, it is comparatively open. Near the centre of the whole space is a part which is slightly elevated above the surrounding country. The people who live there say that it is always above water, even when the rest of the town is flooded. It is covered with huts. North of this are some kyounge, and a large basin of water formed by a loop of the Theng-za. This is surrounded by huts. On the east bank of the creek are many pagodas. The three principal groups are—first, to north of *A* road, and between it and a small choung which joins the creek here, the second, on the north side of the choung, and the third, east of the latter. They are all surrounded by brick walls about 4 feet high. Between the west bank of the choung and the embankment are a lot of huts, and about the middle some kyounge. The summer palace is on the river bank west of the embankment, and almost half way between the two roads.

Between *B* and *C* roads, the land lying west of the Theng-za creek is Country between *B* and *C* occupied by huts and timber yards. East of the roads. creek is a strip of water and swamp extending up to the Shway-ta-choung. There is only a rickety bridge and a footpath which communicates between the two roads. A portion of the ground east of the Theng-za and south of the road is covered with tombs, pagodas, and sayats, and these are sheltered by many fine trees. The ground on which Dr. Marks' school and the residency are situated is low-lying and about the worst spot in Mandalay that could be chosen for a site.

The creek running close to the embankment here leaves little space between East of the creek the ground for 500 yards Country between *C* and *D* roads. is densely covered with trees, in which are pagodas, kyounge, and many huts. To the east of this comes a stretch of paddy land, and further on a timber yard, and then some huts and kyounge. A lane runs between these roads on the east bank of Theng-za creek.

The country lying between the *D* road and the north face of embankment is almost quite open. West of the Theng-za creek Country between *D* road and embankment. there is a level space between it and the embankment, which is dotted with occasional clumps of trees and villages and plantain gardens. Near the north end there is much marshy ground.

To eastward of the creek a strip of slightly elevated land runs north and south. On it are some pagodas and a village. To the east of this nearly all is paddy land and swamp, but occasional small mounds rise up and mark the site of a ruined pagoda. Along the west bank of the Shway-ta-choung is a line of flower gardens which extend from the *D* road as far as the

continuation of the north ditch road. Further north along the choung is a large swamp. The whole of this ground is said to be under water in the rains.

The communication to the south of A road passes from different parts of the embankment to the Shway-ta-choung and the Theng-za creek, where it is crossed by a bridge leading to A road. There are no roads, but simply cart tracks. The land here is quite level and for the most part open. For some distance inland from the embankment it is thickly wooded, and there are many gardens and clusters of huts. Part of the country here has been cultivated, and there are many brick fields in different parts. During the floods this part is said to be all under water, but in December and January it was quite dry and passable. The Theng za creek has to be crossed in advancing to the east. It is here 50 yards wide, and the road passes over a bund. East of this is a large plantain garden a short distance from the south side of the road. On the north side are some kyoungs, and further off near A road is a large pukka kyounng with a dome-like roof.

This route would be useful to turn the flank of any defence of the southern canal in case a party was advancing from Amarapoora.

The embankment on the western and southern sides can also be used as a road, and it would be advisable for the party detailed to out the embankment at the end of the Theng-za creek to advance along it.

The approaches from the north side are three, but to reach these it is necessary either to march up by the northern embankment or to advance south from Madeya.

They are—

1st.—The Shway ta-choung

2nd.—The Bhamo road

3rd.—A road from north-east which passes the embankment near the Mandalay hill.

The Shway-ta-choung branches off from the Madeya river 12 miles north of Mandalay, and flows south right through the town. There is little water in this choung after December until the river rises, and only small canoes can be used. The road along the bund is very bad, being muddy in rainy and very rough in dry weather, and the country beside it, being either paddy land or swamp, does not offer an alternative route. This route may therefore be considered impracticable.

This may be said to commence at the embankment, whence it leads straight to the city wall. It is a bad road in some parts, and pretty good in others. A considerable portion of it passes across a swamp, and this part is raised. It could be easily destroyed here, and would take some time to repair. The road passes over some drains which are badly bridged. These drains are deep cuttings across the roads which were originally bridged over. Most of these bridges get out of repair and remain so. The drains become mud holes from 4 to 10 feet wide, and 2 to 4 feet of mud.

The third route passes through the embankment north of the hill. It comes along the top of the bund of the Nanda lake, and passing between the embankment and foot of hill joins the centre road, which runs from the north centre gate to the royal garden. The part along the bund is very bad, and the part between the embankment and centre road is only a fair weather road. The centre road is good.

These roads would only be of any use in the event of troops finding their way along the north embankment to the Shway-ta-choung, in which case they would at once proceed to the hill and establish themselves there.

The whole country to the north of Mandalay, from the Irrawaddy on the west to near the Shan hills on the east, and from the embankment on the south up to Madeya 12 miles further north, is a succession of swamp and paddy fields, quite impassable at any time of the year. The part between the river and the Shway-ta-choung is the worst, as the greater part of it is low-lying swamp. North of the choung the ground rises slightly, and there is an open space a few hundred yards north of the embankment. In the centre of this are three pagodas, and east and north dry cultivation. The country up the canal and embankment is quite open. The soil is a sticky impermeable black clay, which when dry is as hard as a brick and difficult to break in the hand. This is the

Camping ground. only available camping ground on this side, or indeed in the whole of Mandalay, excepting Mandalay hill and the ground at its base, which is the best in this part of the country.

South of the embankment the country is, near the hill, covered with kyoungs and pagodas, between these is open grass land, over which it is easy to approach the foot of the hill. There are a few houses on the north side of the hill. Near the city are a few huts, chiefly occupied by palace and other officials. The chief feature of this part of the town is the immense number of zayats, kyoungs, and pagodas that everywhere meet the view. A large royal garden fills up the space between the Bhamo road, and a large walled kyoung at the foot of the hill.

From the Shway-ta-choung the hill can be most easily reached by the embankment and the country to the north of it. The canal which runs north of the embankment is bunded across in many places.

From the east there is only one approach to Mandalay, and that is by the Aung-pin-lay road.

This comes from the north-east, past the Shan hills. The part east of the lake is bad. On the east side of the lake a bridge is crossed 180 feet long by 18 broad. It is strong and solid and of teak. This spans a deep piece of water which lies between the eastern shore and a large island. On the west side of the bridge are two zayats, one on each side of the road.

The road is 100 feet wide, and the centre is metalled with limestone, but the pieces are not small enough, for the centre is quite unused, and the carts and cattle pass on either side. This centre bit is quite overgrown with bushes. The length of the road between the two banks is about two miles. There are three zayats between the ones at either end. On both sides of the road the water and swamp are deep and impassable, and wild fowls abound. There appear to be three or four dry weather paths across the lake. The western end of the road is very good for a few hundred yards. At the western end is a bridge, and then the western bank, where there is a zayat on each side of the road. The road from this spot up to the city gate is wide, level and good. It is one of the "hundred feet roads." On the south side between the Aung-pin-lay and the canal is a large royal garden. It is a dense mass of foliage, and appears as uncared for as most of the so-called gardens. North of the road the country for some distance is open jungle.

Proceeding towards the city, a few sayats and huts appear, about half-way to the canal, to north of road and further on a few straggling huts. About a hundred yards east of canal a small watercourse passes the road. It is bridged over, the bridge being on the same level as the road. The eastern canal is now crossed. It is large and deep from bank to bank looks quite 80 yards, and is crossed by a substantial teakwood bridge 15 feet wide. Crossing the canal the road bends to the south for a short distance, and then turning west, passes through the embankment and goes straight to city. It is metalled, broad and level the whole way. Most of the northern side of the road is taken up with kyounge and pagodas. On the south are huts for the most part.

The Ta-jay-wa creek enters the Irrawaddy a couple of miles below Amarapoora, and the steamers pass close to it. If it were thought advisable to land any troops to the south of Mandalay, this would be the best place to land them. The creek is about 80 yards wide at the mouth, and there seems to be plenty of water at its junction with the river. The bank is firm, and landing would be easy. The top of the bank is sheltered with large trees all along until near Amarapoora. Behind the bank is a lowly piece of land, and beyond that the ground again rises and is covered with trees. Here the main road between Ava and Amarapoora lies, and there are huts, kyounge, and pagodas nearly all the way between the Ta-jay-wa choung and Amarapoora. This is the best road, but there are two others—one by the east side of the bank, and the other, a mere track, along the river bank. The distance between the east and west roads is not more than from 500 to 800 yards, and in an advance the three roads would of course be used. Both flanks are protected,—on the east by the Amarapoora lake, and the west by the Shway-ta-choung. The eastern road is good, and passes through the present town of Amarapoora. There is a thick shelter of trees on the west side and a thinner one on the east. There are several large pagodas along this road and one large walled-in Chinese temple, which is on the western side of the road. The road runs along the west side of Amarapoora city, and crosses the embankment at the north-west corner of the city wall. A force could pass round by the south and east of the city, and then march by the causeway into Mandalay, right on the Arakan pagoda. Another road leads through the ruined city, and crosses the embankment near the centre of the wall. This is the centre road leading to Mandalay. The country between Amarapoora and Ava is for the most part open. The river bank is well covered with large trees, which shelter a number of villages, kyounge, and pagodas. Along the Amarapoora lake, as far as the Ta-jay-wa creek, is a border of trees. South of this creek for some way the road runs through a noble grove of trees, and after this the country to the east is an open plain as far as the Myit-ngay.

One road to Ava crosses the upper bridge. This is the direct road, and is for the most part paved with brick. It is very bad, and a brick road out of repair is much worse than an ordinary one. Several small but muddy creeks have to be crossed, and on the western side there is a large swamp, which extends for some distance north and south. The greater part of this country would be under water during the floods. At a sayat near the Myit-ngay river I measured the height of the flood mark on the wooden posts from the ground and found it to be over 9 feet, this part may therefore be considered impracticable in the wet weather.

Teak logs and planks are to be found all over Mandalay, but chiefly near the banks of the river. Here are many timber yards where the wood is sawn into planks. There

Materials. were large quantities of logs lying about the bank when I was there. These are drawn across the embankment by buffaloes and put into the Theng-za creek, where they are floated to different places. These logs are useful for stockades or bridges, and failing them there are plenty of huts that would afford ample material for bridging.

The city of Mandalay is over one mile square. It is surrounded by a wall and ditch. The wall is about 25 feet high and 3 wide, of brick very loosely put together, this is backed by an earthen mound about 30 feet thick at the base, and sloping up till within 8 or 4 feet of the top. The top of the wall is crenellated (see photo), and there are no means of mounting guns.

The flanking defence consists of buttresses, which protrude from the wall at the angles and along the faces at regular intervals. These are topped with wooden towers, some of them are elaborately gilded inside.

There are three gateways to each face, and the north, east and south faces have one bridge crossing the ditch, on the western face there are two.

The gateways are of masonry, of great thickness and from 15 to 20 feet wide. A traverse of solid masonry protects them on the outside. The gate is of teak wood, studded with iron nails. It is about 20 feet wide and 1 in thickness. Inside on both sides of the road are guard-houses, between the wall and ditch is a berm fully 60 feet wide and a ditch 100 feet wide by 12 to 18 deep. The water of this is clear and sweet, and is occasionally renewed from the Oung-pin-lay, with which it is connected, the waste water escapes by a drain to the south. The gateway, bridge, and ditch may be seen from the drawing.

The roads in the city are wide and good, and the principal ones are metalled. Like the town, the city is laid out in blocks, each side having 12. A plan of the city is given, from which it will be seen that each block is called by a particular name. The soldiers occupy a large space near the wall, and a granary also takes up considerable space.

In the centre of the city is situated the palace enclosure. It is about 350 yards square, and surrounded by a teakwood stockade, each log is 9 inches diameter or more, and bound together by horizontal bars of teak passing through them horizontally. This stockade is about 20 feet high, inside this is a brick wall.

The palace will be seen from the plan.

A canal flows into the palace from the north, it enters the city from the ditch.

All the pukka buildings are shown by black blocks, the wood by dark shading. The great majority of the houses are of bamboo-and-mat or wood, and would take fire readily — (*Major MacNeill, 1882*)

MAN-GA-KWON—

A village in Main-kwon district.

MAN-HAI—

A village in Main-kwon district.

MAN-HEIN—

A village in Main-kwon district.

MAN-HLEO—

A town situated on the south bank of the Taping opposite to Man-wyne, in lat. 24° 30', long. 97° 40'.

MAN-KHAIN—

A village in Main-kwon district.

MAN-KYWENG—

A village in Main-kwon district

MANIPUR—

The territory which constitutes the Native state of Manipur consists of a large extent of hill country and the valley proper of Manipur. It lies within lat $24^{\circ} 30'$ and $25^{\circ} 60' N$, and long $93^{\circ} 10'$ and $94^{\circ} 50' E$.

It is bounded to the west by the British district of Cachar and the Naga Hills Agency, to the north by the Naga Hills Agency and Naga tribes yet unsubdued, to the east by the Kobo valley, a portion of Upper Burma, and to the south by a collection of Kooki tribes, called by various names and in various states of barbarism. Some of these latter tribes are now pushing forward towards the north-east, and in a few years will probably, together with the Tankhool Nagas and Burma, form the eastern boundary.

The total area of the territory under Manipur is upwards of 8,000 square miles, the valley portion of which, or Manipur proper, is only 650 square miles, the remainder consisting of mountainous land inhabited by a variety of hill tribes, speaking at least twenty different languages.

The valley of Manipur is situated almost in the centre of the large tract of mountain country extending between Assam, Cachar, Burma, and Chittagong. Its height is about 2,570 feet above sea level, with drainage from north to south.

The principal features met with are rice fields, swamps, small muddy rivers, bamboo clumps, barren hills of low elevation, and common looking villages. Immediately on crossing the ridge from Cachar the tree jungle disappears, and the eastern slope of the hill range is bare and covered with grass. Scarcely a tree is to be seen, save in the ravines, which occur at intervals along the range.

Looking down the valley, the first object that presents itself is the Logtāk lake. South of this, and up to the boundary of hills in that direction, the valley is almost entirely uncultivated and covered with grass jungle. To the north and east villages are seen, and in the distance to the north, in a corner under the hills, lies the capital. Here the country is well wooded and more densely populated than in any other part. Towards the east the view is bounded by the Hieerok range of hills, which divides the valley from that of Kubo in Upper Burma. In the valley are several small ranges of hills running in various directions, nearly all bare of trees and covered with scanty crops of grass.

Several rivers from north and west enter the Logtāk lake, from which one emerges and uniting with others flows from the valley to the south.

The general shape of the valley is that of an irregular oval, its length is about 36 miles, and greatest breadth about 20.

The hills to the north infringing on the valley are from 5,000 to 6,000 feet above sea level. To the east runs the Hieerok range, which attains an elevation of 6,000 feet. To the south the hills are lower—probably not over 4,000 feet high.

The general run of the hills is north and south, and their aspect that of irregular serrated ridges. Occasionally, as in the western range of hills overlooking the Manipur valley, the summit of the hills present a more open and rolling character.

By far the largest tract of country owned by Manipur is that situated in the hills surrounding the valley. Their area is probably 7,000 square miles.

The following is a list of the hills and mountains within Manipur territory to north, north-east, east and south —

North.

1. Kowbree.
2. Nung phow
3. Myang khong
4. Sudiem.
5. Thimbah Karung
6. Muram Kholel.
7. Mao Range
8. Tangal Hills.
9. Kutang Laya.
10. Phubah
11. Kohah Ching
12. Angamei
13. Kohima.

North East

1. Mukok Chang
2. Mapom Ching
3. Mukeng Chung
4. Chuoyai Ching
5. Khamsole Ching
6. Lyvul Ching
7. Kagai Ching
8. Ngari Molong
9. Thyboong
10. Lyi
11. Prowl.
12. Tangkhul.
13. Lupah

14. Mupitel.
15. Chutong Lumlai.
16. Hungdung
17. Ok khurul.
18. Haining
19. Nungbi Nunghar
20. Mukubang
21. Chatik.

East

1. Hieerok
2. Waba Ching
3. Kaiphum Ching
4. Unapokpi (or Yangapokpi)
5. Uchalpakpee.
6. Hamupokpi (or Hytookpokpi)
7. Numthow

South.

1. Thang Ching
2. Khong Sungkul
3. Lelhang Chingwang
4. Chungbeole
5. Tsaklapai
6. Hanga pat-lel.
7. Surtol
8. Molbung
9. Chaba.

[*Note*—The information contained in the following pages is, unless when otherwise specified, taken from the annual reports of the Manipur Agency.]

The whole of the hill ranges lying between Cachar and Manipur, and far to the north and south, are densely clothed with their summits with tree jungle. Almost the only exception to this are the hill slopes facing the valley. These slopes have been steadily cleared of their timber, consequently they present a denuded appearance. The tree forest presents great variety, and in the ranges lying west of Manipur there are large forest tracts of trees comprising nagesar, jarul, india-rubber, toon, oak, ash, &c. Bamboo jungle is every where plentiful. Towards the north in the valleys dividing the hill ranges one from another, the forest trees attain immense sizes and heights, and where this kind of forest exists the bamboo is uncommon.

In the Hieerok range lying between Manipur and Burma the jungle is much more open, and very large trees are rarer than either towards the west or north, and the bamboo is confined to the lowlying ground and ravines. Fir trees are occasionally seen, but are not plentiful. Teak is common on the slope overlooking the Kubo valley. From the hills to the south of the valley most of the wood used in building is obtained, some of the varieties are said to be proof against the ravages of the whiteant.

The fir tree where met with is highly resinous, and the trees are of large size. Near the salt wells to the north-east of the valley on the first low

range of hills rising from it are numerous clumps of fir, this tree diminishes in numbers as the hill ranges in that direction are ascended. To the south the fir is plentiful.

The slopes of the hills, with few exceptions, are easy, and can be traversed both by ponies and men

Rivers.

The chief rivers flowing eastward are the Impal, Eri, Thobal

These, rising in the hills to the north, flow eastward past lake Logtak, where they join the Kortak, which emerges from the lake and forming one river, which flows south, and eventually falls into the Ning-thee or Chundwin river below the town of Kendat

The only river of any importance in the Hieerok range is the Lokchao, which drains into the Kubo valley, and is of inconsiderable size

All the rivers are fordable at any time of the year

The only important lake in the district is the Logtak. The irregular sheet of water is of considerable size, but is yearly growing less

Other lake like sheets of water exist in various parts of the valley, chiefly towards its northern extremity

The general opinion of observers as to the formation of the Manipur valley is, that in former ages it was chiefly a large lake, which has gradually contracted in size, until what remains of it is seen in the Logtak lake

At Zanda-rua (perhaps the Sin myo of the map) on the left hand (west)

Routes between Burma and cross over by the Toung-boung kioung (Toung-dwen-gyoung on Yule's map), and then go by land towards the north (*Yule*, page 174)

"One of the officers of our Burmese guard says he was at Manipur on the expedition made by this king. They went by Mout-zobo, Myedú, Theingan, Koungan and Nakioung mee (Nalkwonoung we, or Kendat). This is the last town in the Burmese dominions, and is 15 days' journey from Amara-poorá" (*Yule*)

"The whole country between the Chin-dwin and Irrawaddy," he says, "is full of towns and large villages" (*Yule*)

There are four principal routes leading from Manipur to Burma. They are called —

- (1) The Kongal route—most northerly
- (2) The Muchee route.
- (3) The Imole or Morai route.
- (4) The Ngasuna route—most southerly

The portion of these routes in the valley of Manipur lies over a particularly level and open country, whose rivers are all fordable

Thobal is the general point of departure for parties proceeding to the Burma frontier, and the routes most generally frequented are those *via* Muchee and Imole, both of which after crossing the Marring or Hieerok range of hills pass into the Kubo valley, from whence as occasion requires troops may advance with equal facility north to Sumjok or south to Khumbat and Kalay through a level and well watered but nearly uninhabited valley, covered from one extremity to the other with dense bamboo and lofty forests of sal, kio, and teak trees

The first route, or that *via* Hieerok (Hieerok) and Muchee, is from Thoba to Tummoo, 46½ miles, of which nearly 36 lie among the hills

The total distance of the second, *via* Imole* and Morai between the same Route *via* Hiseok, Imole, points, is 42½ miles, of which about 27 only pass and Morai thana. over the hills These hills have but few steep or precipitous passes to be overcome

On the Muchee route after reaching the summit of the range from the Manipur valley, which is attained by a gradual ascent, the road passes over a series of undulations, few of which are of any extent, and no river is met with

On the Imole route there is one rather steep descent into and ascent from the Lokchao river, but the remainder of the journey presents no difficulty to the advance of laden cattle

On both routes the supply of water is scanty, and it would be necessary to march any large body of troops across by detachments, to ensure them an adequate supply

On the north of these routes there is another which leaves Manipur at Senginiee and, passing through the villages of the Tangkool tribes, enters the valley of Kubo at its north-western extremity a few miles west of Sumjok On this route there is but one river to be crossed, the Turet, which is always fordable, and it is the best by which a detachment advancing against Sumjok could proceed

Further south through the Anal and Mneeyal tribes of Nagas, several other lines of communication are shown in the map, by which the southern extremity of the Kubo valley might be entered, if necessary, directly from the hills, but they are all so much more circuitous than those already described, that they could only be usefully employed by troops destined to make a flank movement against a Burmese force †

MAN-LA—

A village 1½ miles north east of Let-toke It contains about 400 inhabitants

MAN-LOUNG—

A lake about 1½ miles from the town of Sit-kaw in lat 23° 25', long 97° 5' The western bank is high and wooded, but broken by two channels, through which the Man-loung stream issues, uniting below a small island on which stands a Shan village of the same name Besides this, there is another island and a village named Moung-poo The high bank is continued on the north beyond the lake, as a prominent ridge covered with tall trees extending in a bold sweep to the foot of the hills It appeared evidently to be an old river bank, and that the lake marks what was once the course of the Taping

The Man loung stream falls into a remarkable offshoot of the main river, which afterwards rejoins the Taping by several channels This stream is deep and rapid, and supplies several irrigating water wheels

The lake is two miles long and a mile broad, and, according to native accounts, very deep To the east extended a succession of swamps hidden under a luxuriant growth of high grass Careful search discovered no springs or streams as sources of supply, although doubtless the former exist, as there is a constant outflowing of water, it is probably also a reservoir, filled annually by the overflow of the Taping, which during the rainy season frequently floods the level plain to a depth of two feet for some days at a time, the flood suddenly rising and as suddenly subsiding

The village of Man-loung contains about 80 houses — (*Anderson, 1868*)

* This is the route by which the Burmans entered Manipur in 1819

† For further information, see *Gazetteer of Manipur* by Major MacNeill, 1868

MAN-MAW—

Another name for Bhamo 'Man' is Shan for 'village,' and 'maw' for 'pot' thus 'Man-maw,' or Bhamo, signifies 'potter's village'—a name still justified by the pottery there manufactured

MAN-TA-KHYENE—

A village in Main-kwon district

MA'OO—

A thriving little village on the right bank of the Irrawaddy, in lat 22° 38', long 95° 55'

MARAN—

A clan of Kachins in the Kachin hills east of Bhamo

MARAN-GYEE—

A late king sawbwa of the Kan-loung Kachins He was succeeded by his son *La-bang-ka-ahin-teing-nan*

MARA-POON—

A hill near the Irrawaddy A Kachin sawbwa lives here

MARAWA—

Name of a hill The territory of the Kansa Kachins ends Beyond this the Kan-loungs dwell

MAREK-KA-TANTOO-NAW—

A Kachin sawbwa, who lives at Mara-poon

MAROO—

A tribe of Kachins

Maroo tribe

The Maroo tribe of Kachins are divided into the following —

- 1 Lamna.
- 2 Malan

- | | |
|---------|-----------|
| | 3 Lawice |
| | 4 Lapouk. |
| 5 Kalan | |

These speak a different dialect from the Kansa and Kan-loung tribes, and are said to be a simpler, quieter race, and do not commit the same barbarities as the latter

The Sawbwa of Mo-goung-poon said that the Maroos inhabited the country as far as the sources of the river After them and beyond the river came a people wearing white clothes and speaking an unknown language To the east of Maroos are more Kachins

MATTIN—

A village Is situated on the ridge of the spur of a hill

MAWE—

A considerable village on the east bank of the Irrawaddy north of Mandalay It is at the mouth of the Choung Ma-gyee, a considerable stream about 150 feet in width, running down from the eastern mountains Rice is cultivated here

MAW-LOO-POON—

A hill near the Irrawaddy, the head-quarters of a Kachin sawbwa.

MAW-LOO-WA—

A sawbwa of the Kan-loung Kachins, living at Maw-loo-poon

MAW-PHOO—

Situated at the extremity of a high comparatively level basin marked by two terraces on the northern side cut up by deep watercourses from the hills above

Maw-phoo is a wretched walled village in ruins

MAW-PWA—

A village on the Salween river

MA-YAT—

A village of Minp tribes.

MAY-HA—

A stream is about 120 feet wide over a good wooden bridge at the village of Ban-don, which is entirely occupied by Chinese. Following the course of the May-ha, we gradually got amongst the hills these were high, and occasionally rocky and steep, there were, however, loftier ranges on both sides of our route

MAYIN-GAIN—

This is a little stockade built on the Arakan frontier on the route over the An pass. It is an excellent position and is the key to the An pass. The water here is good, but difficult of access. Reservoirs would have to be constructed for cattle —(*Trant*)

MAY-LOME—

A small village of 8 or 10 houses on the road from Karennee to Mandalay, in lat $20^{\circ} 17'$, long $97^{\circ} 30'$

MAY-LONE—

A small village of 8 or 10 houses

MEBBEE-GOO—

A village on the Myin-gyan—Nyin-gyan road, 19 miles from the former place. It is situated on the bank of a small stream

MEE-YAH—

A village of 20 or 30 houses on the Myin-gyan and Yemay-then road. There are several pagodas and kyoungs. The country near is well cultivated

ME-HA—

A stream, is about 120 feet wide, a very good wooden bridge over it. Following the course of the Me-ha, we gradually got amongst the hills, these were high, and occasionally rocky and steep, there were, however, loftier ranges on both sides of our route —(*McLeod*)

ME-HEM—

A stream of about 40 feet wide, with 3 feet of water

MEIN-KWON—

Is situated on a very small stream the Edi-khoung. The village is large and well stocked, and is divided into two by this nala. Population about 200

MEIN-PON—

A village on the route from Banoung (in Karennee) to Mandalay. It contains between 80 or 100 houses. The valley in which it is situated is about 10 or 12 miles long from north to south, by 3 miles in width —(*Richardson, 1835*)

MEMBOO—

This is the nearest point on the Irrawaddy to the Aeng pass, and a road runs from this to Ma-phay at the foot of the pass, as well as to Murdoon. The heights surrounding are thickly studded with pagodas

MENAOON—

A town on the Irrawaddy

MEN-GEE-DAN—

A small stream near the village, which consists of about 100 houses —(*Dr Richardson*)

MEN-GOON—

These are the ruins of a gigantic pagoda situated on the right bank of the Irrawaddy about five miles above Mandalay. It was built by king Meng-tara-gyee, or Bodaw Phya (the grandfather king), as he is commonly called by the Burmans.

"This king, who died in 1819 after a rule of nearly forty years, spent twenty years of the earlier part of his reign in piling together this monstrous mass of bricks and mortar, employing on it the unpaid labour of a vast number of his subjects and an expenditure besides, it is said, of 10,000 viss of silver. It was left incomplete, and the great earthquake of 1839 shattered it to its foundations.

"This ruin is doubtless one of the largest masses of solid brickwork in the world. It stands on a basement of five successive terraces of little height, the lower terrace forming a square of about 450 feet. From the upper terrace starts up the vast cubical pile of the pagoda, a square of about 230 feet in plan, and rising to a height of more than 100 feet with slightly sloping walls. Above this it contracts in successive terraces, three of which had been nearly completed when the work was abandoned."—*(Fule)*

The height of the ruin as it stands is about 165 feet from the ground, and the solid contents must be between 6,000,000 and 7,000,000 cubic feet of brickwork. Great treasures are supposed by the Burmans to be buried here, but Captain Cox, who was present at the time of its construction in 1797, speaks of plated models of kyonngs and pagodas, of others said to be of solid gold, but which on examination proved to be less valuable, of marble images, trumpery guns, slabs of coloured glass, white umbrellas, and last of all a *soda water machine*, as amongst the consecrated valuables.

MEN-GYEE—

Or "great prince," seems to be their appropriate title of address of woon-gyees. But their formal designation in Burmanised Pali is, "Egga Maha Thina-padi" or "Thinadi-padi."

ME-SAI—

This stream is about 40 feet wide and 2 feet deep, and it flows to the eastward to join the Me-khong—*(McLeod)*

MEZA-SHWAY LAY—

A river which joins the Irrawaddy from the right bank in lat. $21^{\circ} 22'$

This river flows from the north-easterly extremity of the Zee-byoo-tonng or Noa-jee-ree hills, directly across the upper portion of the valley of the Moo, and from thence through the Shway meng-woon-toung into the Irrawaddy. The principal places in the upper part of the course of this river between the Noa-jee-ree and Shway-meng-woon ranges are Phyanee, Kha-onng-toung, Mulaung, Saga-doung, and Nga-nan. The country is tolerably well inhabited by Shans, and some Sengphoo tribes inhabit the northern extremity of the valley—*(Pemberton, 1835)*

MINE-BYIN-MYO—

Is in lat (estimated) $21^{\circ} 5' N$, long (assumed) about $96^{\circ} 45' E$, and is at an elevation of 2,040 feet by the boiling point and 2,400 by the aneroids. This is about 1,400 feet lower than the Toung-hla valley.

The town is situated in the Great Mine-byin valley. The soil of the plain is a stiff alluvial clay of a peculiar grey or slate colour. Within a mile of the town to the south is the Nat-ee-choung, crossed by a substantial wooden bridge.

There are several fine tanks of water in the neighbourhood of the town, which is situated on the low country bordering the east side of the alluvial plain

From Mine-byin-myo a road runs direct to Thien-nee through the valley to north *via* Youk-zouk and Thoung-zee. Another lies direct *via* Lay-deah-myo

MINE KHA—

A large village

MINE-KHAT—

A village is in a cultivated vale about half a mile broad, with irregular wooded hills on the east side, this small vale drains to the north-west.

MINE-KINE (VALLEY)—

In Shan states North of Lay-deah-myo and in the valley very many streams of water are crossed, but among these truncated hilltops much of the drainage is into hollows and holes, and thence is continued underground

These elevated parts are clad with long grass, fern brakes, and in part woods of fir and other trees. To the westward three steep and lofty ranges are visible, running apparently north-north-west and south-south-east.

MINE-LOOP-SOP—

A gold washing place on Nam-poung north of Ban-ze

MINE-TIN—

A village in Thien-nee district

MINE-TOOM—

A village on the Salween river

MINE-YAW—

A village in Thien-nee district

The scenery around Mine-yaw is beautifully grand. "It fails me to attempt a description, and I must therefore content myself by comparing it to views in Switzerland. The valley, contracted below (where the stream falling over a succession of rapids wanders through deep ravines), here widens out in fertile downs and slopes three or four miles across, and was doubtless a great lake originally. This idea is strengthened when viewing a large cascade on the north side of the valley, where the water of a mountain stream, coming to an abrupt termination of its bed, falls precipitously a depth of 50 feet into the valley"—(*Anderson*)

MINE-YE—

A village

MINE-YIN—

A village in Thien-nee district

MINE-ZAIK—

A large village in Thien-nee district is situated in a small vale from the north, not more than a mile across, and bounded on either side by low hills steeply scarped towards the valley. Far off to the westward many long ranges are visible, and I was told that Thee-baw lies to the west-south-west, distant about 20 or 30 miles

MING-YAW—

A village in the Yemay-then district is situated on the eastern road, lies about 2 miles to the south-east. Here there are two large yayats and a large stream of water. Half a mile beyond Kyoon-bin-kon is the large village of Onng-kyee-kon

MISHMEE—

The Mishmi or Mishmee frontier touches that of the Padam or Abor, being on the drainage of the Dehong and Dibong. The details of the area beyond it are unknown. Its villages are small.—

Jillee and Anundee contain	30 to 40 families.
Maboone	10 families.
Alonga	20 families.
Chunda	12 families.

The Mishmi, though differing from the Padam in language and religion, acknowledge them as relations, and a common origin is claimed by the two populations.

They will eat together, they also fight with each other. Captain Wilcox described them as variously dressed, but did not wear anything woollen. They use poisoned arms.

The Beebhajee tribe were accused by the Mishmis, who were at war with them, of cannibalism.

"The hut of the chief of the The-thong Mishmi was strangely and filthily ornamented," says Captain Wilcox. "Long poles of bamboo were hung with the blackened and smoke-dried skulls of all the animals with which the owner had ever feasted his friends and retainers."

Some of the tribes turn up the hair and tie it in a knot, whilst others are closely cropped. The lower classes dress scantily, the chiefs well, in Chinese and Tibetan cloth and ornaments.

Arms.

The cross-bow is the common weapon.

Polygamy is common, the limit to the number of wives being the means of the husband. For each wife so many heads of cattle are paid. The women mix with the men and join them in every labour but that of the chase.

The people are fair, but begrimed with dirt. The dress consists of a loose jacket without sleeves. The primary article of clothing is indeed so scanty that the less one says about it the better. The women are decently dressed, and have, says Griffith, enormous calves. Wilcox also speaks of the enormous calves of the Gam of Dilling's daughter, which were twice the size of his own.

The Mishmis are traders. Every man amongst them will either beg or sell. They are also blacksmiths and forge their own spear heads, though they buy them as well.—(*Latham*.)

MITHALAN—

A small town 60 miles from Myn-gyan on the road to Yemay then. It seems of no importance as a commercial centre. Near this is the lake of Mithalan, which is crossed at the narrowest place by a strong teakwood bridge. The plain of Mithalan is 15 miles in extent to the south, to the north is scrub jungle, which is said to extend up to Ava.

MOGOUNG—

A town in the district of Mogoung in lat 25° 18', long 96° 41'. It is situated on the right bank of the river of the same name, just below the junction of the Nam-yeen-choung, contains rather fewer than 300 houses, its extent, however, is considerable. It is surrounded by the remains of a timber stockade similar in construction to those of Burma proper. The houses are mostly small and squalid. Nothing good is to be found in the bazaar, pork is plentiful. The best street in the town, though of small extent, is that occupied by the resident Chinese, of whom there are some 60.

The inhabitants are mostly Shans, but there are also some Assamese.

Mogoung is situated in a plain of some extent, surrounded in almost every direction by hills, all of which, except Shway-deung-gyee, are low, the nearest being about 3 miles off. The Mogoung river is here about 100 yards broad, but much subdivided by sandbanks, it is navigable for moderate sized boats a considerable distance above the town.

MOGOUNG-MAING-KOUNG—

The head-quarters of the Kachin sawbwa San-oung-lee.

MOGOUNG-POON—

This was the highest place the explorers reached, and is situated in lat. $26^{\circ} 8'$. The sawbwa of this place said he had formerly lived at Sakee-poon, and had been to where the Irrawaddy ended five or six days' journey from his former house — (*Native explorer, 1879-80*)

MOH-LAY—

A narrow stream rising in the Kachin hills. It has a course of 96 miles, for 80 of which it is navigable in the rains. A small boat traffic exists, chiefly for the conveyance of salt. It joins the Irrawaddy above Bhamo in lat $24^{\circ} 18'$, long $96^{\circ} 50'$.

MOK-MAY—

A town in the Monay district situated in the valley of the May-neum, in lat $20^{\circ} 8'$, long $97^{\circ} 25'$, containing perhaps 800 or 350 houses, some pagodas, a kyoung, and a small stockade sadly out of repair. Though the town contains many inhabitants, they live in perpetual dread of attack from the Karens. They keep a sort of outpost of 10 or 12 men within a bamboo fence, looking out for them within sight of the town — (*Richardson, 1835*)

MOMIEN—

This is a Chinese city called by the Chinese 'Teng-yue chow,' better known by its Shan name of 'Momiens'. It is situated in lat $25^{\circ} 1'$, long $98^{\circ} 30'$.

It is said to have been built four hundred years ago by a governor of Yung-chang, obeying the king of Mansi or Yunnan, which the Shans call Muang-ri.

It was probably built as a frontier garrison to keep in check the recently conquered territories of the Shan kingdom of Pong. It became, as it still is, the ruling head-quarters of the Tushan shan-pyee, or Nine Shan states, now represented by those of the Sanda and Hotha valleys, with Muang-tn, Muang-mo, and Muang-mah.

The plan and construction of the city show it was built as a fortress. It occupies an area of 5 furlongs square, enclosed by a strongly built stone wall 25 feet high and crenellated. Twenty yards from the walls a deep marsh surrounded the once city. It was still perfect on the eastern and southern sides, but had degenerated into a broad puddle on the western.

The masonry is admirable, the well known slabs of lavaceous rock, two to four feet long, being laid in mortar hardened almost to the consistency of stone, while the moat is faced with stones laid together without mortar, so close and true that a penknife can scarcely be inserted between them.

Inside the wall an earthen rampart, about 30 feet wide and 18 feet high, serves as a battery parade-ground as well as a promenade. There are no bastions, but at intervals turrets rise from the ramparts, built of blue burnt bricks, the smooth surface and sharp edges of which are uninjured by the wear and tear of centuries. The four gateways, to each of which corresponds a substantial bridge spanning the moat, are lofty and well built. The south-western or bazaar gate was especially fortified by a semi-circular traverse, an entrance in the side of which led into a tunnel-like archway, over

which rose a lofty watch-tower, with concave roof, supported by strong pillars. The inner doorway was closed by heavy ironed wooden valves, which were carefully shut at nightfall. Viewed from a distance, the walls and turrets with a lofty pagoda and the roof of the watch-tower seemed to indicate a populous and thriving town, but within the walls was almost emptiness.

Vegetables and fruit are to be obtained here. Among the former are peas,

Vegetables and fruits.

beans, potatoes, celery, carrots, onions, garlic, yams, bamboo shoots, cabbage, spinach, and ginger.

The fruits are apples like golden pippins, pears, peaches, walnuts, chestnuts, bramble berries, rose-hips, and three sorts of unknown fruits. Mushrooms are in great demand, as well as an almost black lichen, black pepper, betelnut, and poppy capsules, and salt in compressed balls marked with a government stamp.

The whole bazaar suburb is surrounded by a low brick wall with several gates, each guarded by a sentry at night.

Bullocks, buffaloes, sheep, goats, and pigs are obtainable. The buffaloes

Stock.

are chiefly used for agriculture, the heeves have no hump, and are small but well made, generally of a

reddish brown colour deepening to black. The numerous sheep belong to a large black faced breed, with convex profiles.

Two kinds of goats are common,—one with long shaggy white hair nearly sweeping the ground, and flattened spiral horns, directed backwards and outwards, the other kind with very short dark brown hair, short shoulder list and full beard, with similar flattened spiral horns, but not so procumbent. The pigs seem all black.

Remarkably fine ponies are common, but mules, which are much more

Ponies and mules

numerous, are more prized.

Fowls, ducks, and geese are abundant and large.

Many cats, but few dogs, and those black, with shaggy coats resembling shepherd dogs.

The south-west monsoon sets in in June, and prevailed when Dr. Anderson

Weather

experienced it, with very few fair intervals.

The sky was obscured by thick misty clouds that wrapped the hills in dense folds. As a rule, the rain fell very heavily, but there were days together when it was little more than a thick Scotch mist in a dead calm.

Occasional thunderstorms of terrific grandeur burst over the valley, accompanied by stray gusts from the south-west, but the most characteristic feature of the weather was the generally perfect stillness of the atmosphere, while low-laden clouds poured down incessant rain, generally heavy, but sometimes only a gentle drizzle. The temperature was by no means oppressive, the mean maximum in June being 74° and the minimum 62°. The natives assert that the climate is unhealthy for strangers, and we all suffered more or less from intractable diarrhoea. —(Anderson.)

By far the greater part of the valley is under water for six or seven months, during three of which it is little better than a huge morass. It is, however, beyond the range of miasma, being more than 5,000 feet above the sea level and singularly destitute of trees.

MOMIET—

A town in Upper Burma, lat 23° 30', long 96° 30'. There is communication with Sampaenago by the Sampa river in the rains. There is also a land route

to Thin-gyain on the Irrawaddy north-west of Momiet. The land route from Sampanago occupies four days, general direction N 65° E. Three ranges of hills are crossed. There are no villages by the way except the customary halting-places.

Momiet was formerly a very considerable Shan town, under a sawbwa of its own. It is now under a Burmese officer called a myoke, inferior in rank to a woon. The town consists of about 200 huts and bamboo hedges, surrounded by a double mud wall, falling to decay.

The chief products of the district are tea and paddy, both in large quantities.—(*Bagfield, 1825*)

MOMOUK—

A village on the left bank of the Taping river

MONAY—

A town of about 1,600 houses, and a population of about 8,000 or 10,000, of whom 2,000 are Burmans. It is situated in a valley which extends a few miles south of the town and 10 miles north, and varies from 1½ to 8 miles in width, at the town it is nearly 5 miles wide. At the south end there is fine paddy land irrigated by the Nam-tween stream.—(*Richardson*)

MON-HLA—

A town in lat 22° 16'. Near this are the famous ruby mine in the territory of Chia-pieu (Kyat-pyen). It is surrounded by nine mountains. The soil is uneven and full of marshes, which form seventeen small lakes, each having a name of its own. It is this soil which is so rich in mineral treasures. It is only the ground that remains dry that is ruined or perforated with wells whence the precious stones are extracted. The mineral district is divided into 50 or 60 parts.

Square wells are dug to the depth of 15 or 20 cubits, and then the soil is taken out in a horizontal direction. This is lifted out in baskets and washed, and the precious gems extracted.—(*D'Amato*)

MOO-NAM—

A small stream in the Kachin hills

MOON-KOUNG-POON—

The head-quarters of the Kachin sawbwa Souk-Kane

MUANG-HAI—

A town on the route from Kiang-tung to Kiang-hung. It contains about 150 houses, it has 13 villages attached to it, and the valley is watered by the May-ha, over which several bridges are thrown to facilitate the communication with the villages on the opposite or western side of the valley.

MUANG-HAM—

Stream, is 35 feet wide, flowing to the southward and westward over a stony bed. Muang-ham, a town of 200 houses, situated on both banks of the river. The road was very good throughout, and the hills all thickly covered with jungle.—(*McLeod*)

MUANG-KAH—

A stream, is about 15 feet across and flowing in a deep nala, which is the boundary line between the Lakhous and Cowlee Kachi, into whose borders we now entered. The glen was very narrow, but the rich black soil very fertile, judging from the appearance of the small rice fields. The only bridge was a felled tree, less than a foot broad, with a rickety bamboo tied on as a handrail, along which we scrambled, almost envying the animals which swam across.

MUANG-KHIEN—

The village of Muang-khien contains about 100 houses, there is not a tree of any sort about them. In the vicinity are fields and cotton plantations —
(*McLeod*)

MUANG-KUN—

A village in the Kachin hills

MUANGLA—

Or Mynela, nearly 90 miles from Bhamo, stands on a high slope on the left bank of the Taping, enclosed by a brick wall nine feet high, with numerous loopholes and occasional guard-houses. The wall, with its six strong gateways, protected by traverses, appeared to be in much better condition than that of Sanda. With the exception of the broad bazaar street, the various roadways were mere lanes paved with boulders. The population within the walls could not exceed 2,000, which might be doubled by the addition of the large suburban villages close to the town.

Viewed from Muangla, the western range of the valley culminates in a bold precipitous mountain, frowning above the Taping, which comes down through a narrow gorge between it and the hills which rise behind the town, and wall the valley of the Tahô —(*Anderson, 1858*)

Mr Gordon estimates the population of Muangla at 6,500. Muangla is 19 miles distant from Nantun, and 42 from Momien.

MUANG-LEM—

A Chinese town in Western Yunnan, said to contain 4,000 or 5,000 houses —(*Anderson, 1875*)

MUANG-LONG—

A walled town in Yunnan, said to contain 4,000 or 5,000 houses. —(*Anderson, 1875*)

MUANG-MA, or BAN-KAP—

The valley in which Ban-kap is situated is nearly all under cultivation, it contains some 20 villages of from 15 to 30 houses each. These houses are far superior to those in Kiang-tung. There are a good many artificial fish tanks. There is a road from this to Muang-mong, running over hills which are not high —(*McLeod*)

MUANG PAK—

Muang pak only contains 6 houses, but there are three or four other villages near at hand. Near the village are some fields —(*McLeod*)

MUANG-PHANG—

A town of 60 houses on the route from Kiang tung to Kiang-hung situated, like the other principal places, in a valley, with some villages round it. The hills surrounding it are higher than those lately seen. Road very good. —(*McLeod*)

MUANG-THA—

A valley in the Kachin hills

MUANG-WAN—

A valley in the Kachin hills

MUANG-WYE—

A village in the district of Latha. It is situated on the southern slope of a hill covered with trees and enormous granite boulders.

MULAING—

A town on the Meza-shway-lay river

MYA-DOUNG—

A small village of only 45 mat and bamboo houses. The district is said to be one of the largest above Ava. Its limits are east to the Swat range

of mountains, 12 miles, north-east to Kem-hnoon-Chnnlwet, 20 miles, west to the Mun-wun thoung or Sagaing range, 20 miles, and south it joins the Tagoung district. The Men-wun-thoung range is the second from the river, and between the opening of the two ranges the Meza-choung runs and forms the boundary lines of the district in this direction.

A good deal of paddy is cultivated in the lowlands towards the eastern hills. The products of the district on the western side of the river are bamboo, teak, rattans, rice, &c.

Cultivation.
This was formerly (1825) the estate of the king's eldest sister called Th'ken-yo — (*Bayfield, 1825*)

MYAIT LOUNG—

Some hills south of the Myit-ngay

MYIN-GOON—

A town in the Myin-goon district about 3½ miles from Koolee-gone. It is surrounded by hedges and branches of thorns, and has two gates.

It is supposed to contain 4,000 inhabitants. Pigs and poultry are plentiful.

Grain. The surrounding country supplies paddy, Indian-corn, and oilseed.

Good camping ground near. There are walled pagodas north and west of this town.

Transport. There are about—
350 bullocks
120 carts.
30 boats of 400 baskets and less.

Supplies. Rice, fowls, peas, and ghee.

Town. The streets in town are straight and about 30 feet wide.

There is an open space inside the town about 8 acres in area. On the south of this there is a piece of good land with kyoungs on it, which is about 4 or 5 acres in area.

The houses have thorn hedges round them 1½ or 2 yards high, none round the town. The houses are 10 to 15 feet high, of timber and bamboo.

On the south of the town is an open plain 100 acres in area. On the east the road to Toung-dwen, narrow and through jungle. On the north-east there is a road to Magway and as far as Toung-dwen-choung. It is narrow and has thick bushes on both sides. There is a good camping ground about a mile south of the town where the kyoungs stand — (*Native information*).

MYIN-GYAN-MYO—

A town on the left bank of the Irrawaddy in lat 21° 25', long 95° 18'. It is the head-quarters of a woon, and there are many rich merchants here.

It is one of the most important commercial towns along the river, and is one of the stations where the Irrawaddy Flotilla steamers call. The Company have an agent here, whose house is situated on the north end of the river bank about ½ mile from where the steamers anchor. The present agent's name is Mr Mooney — (1882).

Population. The population is said to be 20,000.

The principal articles of trade are cotton, hides, sesamum oil, ngapee, salt.

The town lies very low, being just above high water at flood time.

The river bank here runs north and south, and is about 30 or 40 feet high of clay. Large pieces are being continually carried away. It is consequently very steep and would be difficult landing.

The houses of the town come close to the edge of the bank, only leaving room for a road to run along the bank. All the houses are of timber or bamboo-and mat, except 4 or 5 brick houses in which Chinamen live. There are generally enclosures round the houses.

Streets.

The streets are narrow and straight, there are no open spaces inside.

To the north-east of the town and about half a mile distant from the steamer anchorage is some open ground 15 or 20

Camping ground.

feet higher than the top of the bank. This would make a good camping ground. There are many pagodas and kyoungs. The former would not afford shelter, but they are all surrounded by a brick wall 3 or 4 feet high, and the court-yards are flagged, so that they would make good foundations for buildings. These pagodas generally consist of one central pagoda and a number of smaller ones scattered around. In utilising these enclosures, the small buildings should be removed, and only the centre one left standing. From this rafters could be brought out so as to cover the platform, and make a commodious shelter.

The ground east of the pagodas is level, and divided into large fields by high but open hedges. Dry crops have been raised here. There is enough ground about here to accommodate any number of men.

North of the pagodas above mentioned is a large group of kyoungs in a large enclosure, and all about here would be good camping ground.

A road runs from these kyoungs north and south past the pagodas first mentioned and on to the strand road.

There is also a group of pagodas and kyoungs to the east of the town. On the southern side is a wide plain.

Cultivation.

Paddy, wheat, cotton, sesamum, sugarcane, peas and beans, gourds, pumpkins, yams, and vines, are

cultivated.

Wheat, rice, paddy, oil, chillies, salt, onions, butter, and peas, beans, pumpkins, and yams. Beef, mutton, pork, fowls, and dried fish can be supplied in liberal quantities.

Supplies.

Stock

As follows —

Horses

40

Goats

100

Pigs

400

Transport.

The following transport is available —

Carts

250

Bullocks

400

Large boats

60

of 400 to 600
baskets each or
4 to 6 tons ap-
proximately

From this town a road runs to Mandalay north, Pagan south, and to the Shan states to the east. By the latter road the important town of Hline-det is reached after a march of 70 miles (about) over a well cultivated and easy country, as the following short account will show.

Leaving Myin gyan the road passes through cultivated country and many large towns and villages, all of which are well

Road to Hline-det.

fenced round and the roads fenced in with out thorn bushes and briars.

The country slopes gradually up from the river, and an extensive view is obtained. The lofty hill of Pappa-doung is seen from the road to the south and south-west. Its highest peak is 5,000 feet above the sea level.

The road now passes through a gently undulating country of sand gravels and outcrops of thinly bedded rock at low angles of inclination, till within 18 miles of Hline-det it enters and passes through a plain, and at 10 miles over a very slight rise of sandy ground.

At two miles from Hline-det the Sam-mong-choung is met, a shallow stream and dry during the hot weather. It drains from the south, and is said to join the Myit-ngay. From here to Hline-det over a flat alluvial plain.

The marches are as follows —

MYIN-GYAN			
	Miles.		Village.
Ye-see	about 2		Ditto.
Sak kah	" 2		Ditto.
Yetthut	" 1½		Ditto.
Nubbein	" 2		Ditto.
Kantha	" 2		Ditto.
1 Town tha	" 1½ = 12		Town on stream.
Kyounk-chou	" 3		Village
Koolazunay	" 1		Ditto.
Oun tha	" 1		Town.
Kyounk pone	" 3		Ditto.
2 Yon zin	" 8 = 11 = 23		Town on stream
Pa-ung	" 5		Village
Ma-hline-myo	" 3		Town
3. Hpet-taw	" 4 = 12 = 35		Village on stream.
Thubben gan	" 4		Ditto
Tsin myo	" 1½		Ditto
4. May	" 1½ = 7 = 42		Village on stream.
Chyong-song	" 3		Ditto
Thappan	" 2½		Ditto
Pyn that	} 3	{	Village on right and left of road.
Muggeezoo			
5 Kyun-gyeen	" 2 = 10½ = 52½		Village near stream.
Kammam yin	" 3		Ditto
Shway yin	" 3		Ditto
Keedine-kong	" 2½		Ditto
6 Maggegan	" 1½ = 10 = 62½		Village near stream.
Pouk seik kong	" 2½		Village
Hline-det	" 6 = 8½ = 71		Town.

Mr Boxall, an English botanist, left Myin-gyan in January and reached Nyn-gyan in 10 marches. He passed the same towns and villages on the way as are mentioned in the preceding route as far as Thubben gan. From thence his route struck direct for Yemay-then — (*MacNeill, 1882*)

MYIN GYOON—

A village 1 mile north-east of Kyo-bo. Population about 400

MYIN-HLA—

Is about 3 miles north of Malloon on the same bank of the river

When Yule saw this town it consisted of "one long row of houses towards the river, a double street behind, and a third commencing in the scar, with a short cross-street at intervals. Along the river a wide strand is left unoccupied, an advantage which the Burmans almost universally neglect, and on this grow many fine trees, such as the cotton, tamarind, and various kinds of figs, affording a continuous shade. The continuity of the town was broken by a group of monasteries and pagodas which occupy a part of it

Houses.

"The number of houses is stated at 1,000, and could scarcely be guessed lower"

Population.

The population is, according to Yule, 5,000

The old town has, owing to the erosion of the bank, been moved to a hill 500 paces distant from the present fort

The fort of Myin-hla is 50 or 60 feet distant from the river bank, every year when the river rises a portion of the bank is washed away

Fort.

The fort is a square of 205 feet, the walls of masonry, earth, and masonry in thicknesses of 8 feet, they are 25 feet high.

There are two entrances,—one on the east, and one on the western side. In the interior are two flights of steps—one on the north and one on the south side—used to mount on wall. The parapet is 4 feet high, the terreplein 25 feet wide, with an inner parapet 4 feet high

In the interior are 16 chambers, 4 on each side, intended for magazines. They are at present used as barracks and stables for cattle

On the western side, on *the outside*, there is a double flight of steps, one north and one south, facing each other, constructed of masonry, for the purpose of getting on the top of the wall. The steps are broad enough to admit of 4 men ascending abreast. West of these are some huts (about 8) for the garrison—they are 20 feet square by 12 feet high. The garrison number from 10 to 15, and are relieved once every three months from Mandalay. There are no cannon at present mounted—(*Native explorers, 1881*) Boats of 120 to 130 tons here made at Myin-hla.

Just above Myin-hla the stream runs with great violence. Bold cliffs of red sandstone rise on the western bank, between these are grassy nooks

Myin-hla is situated on a flat gravelly plain, the river here from 1,200 to

Geological formation 1,400 yards wide. Passing Mengoon the ground on the east of the river continues elevated, and the

banks high and decided. To the west the river expands, and assumes a lake-like character, is studded with numerous islands, and spreads from 2 to 5 miles in width

Just above Myin-hla on the west bank of the river a high cliff of soft reddish sandstone projects boldly into the river, crowned by a small pagoda on the very edge of its precipitous face

On the eastern bank of the river approaching Mengoon the small ridges of elevated ground stand out well defined against the sky, the unequal hardness of the alternating beds of sandstone and shales giving rise to a curiously regular succession of inclined beds, all dipping to the north and east. Mengoon itself is situated on a bank of stiff reddish clay resting upon sands and gravels

Behind the plains at Myin-hla the elevated ground continues to extend as far as Menboo, whence a wide alluvial plain, extending from 10 to 15 miles between the river and the outer spurs of the great Arakan mountains, continues as far north as nearly opposite to Pagan.—(*MacNeill, 1882*)

MYIN-MA-TE-TOUNG—

A rocky bluff near the Sindoung-kete Sakhan on the road from Toungoo to Yemay-then. There is a large and conspicuous pagoda called Shway-myn-bone (said to be equal in size to the Shway-dagon in Rangoon), built on the summit of a hill in the great valley that sweeps down to the north

MYIT—

Burmese name for river

MYIT-CHEE-NA—

A village of 80 houses on the Upper Irrawaddy, lat. 25° 20', long 97° 3' MYIT-NGAY—

A river debouching into the Irrawaddy at the ancient city of Ava About 20 miles east of Ava, it issues from the gorge of the Kwenapa range, and flows in a tranquil muddy stream between dark and well wooded banks to join the Irrawaddy This part of its course is very tortuous, the stream itself being both wide and deep with a tolerable current. The banks all composed of clay and sand are thickly inhabited and prettily wooded — (Yule)

This river rises in the northern Shan country, and is, according to Crawford, 150 yards wide, and deep, with steep and high banks

Yule gives it a width of 300 yards, and when crossed by him it was flowing with a deep full uniform strong current The place where he crossed it, in a boat, was at the small village of Mee-Thnwé-bouk (charcoal burners' village) This is more than 28 miles from the mouth of the river, and the time of crossing was in October "It does not, according to the people, vary nearly so much as the Irrawaddy, and should, from what they said, be navigable for moderate sized boats throughout the year It is stated to continue navigable, for four days, above Shwe-zayan (probably about 80 miles), and then to become rapid and rocky The name Myit-ngay, or 'little river,' is evidently bestowed in distinction from the Irrawaddy only"—(Yule)

The area drained by this river is 14,000 square miles — (Gordon)

MYO—

A Burmese word signifying 'town,' properly speaking 'fortified' A myo is divided into wards, called ayats, each of which is under the direction of an inferior police officer, called the Ayat-gaong

MYO-HLA—

A village on the Sittang (or, as it is there called, Pong-loung stream), it is our frontier village, here are stationed 80 policemen, under a head constable They live in a small bamboo stockade, about 50 yards from the river bank The houses inside are all thatched, and the stockade itself is constructed of inflammable material Myo hla is 4 miles short of the boundary pillar

MYO THA—

A town 3 miles east by south from Kyweh sein It is surrounded with branches of thorns, and has two gates

The population is estimated at 3,000 souls, close by is a zayat and a well

Water-supply There are other wells in this place There is a stream north-east of this place, name unknown

On the opposite bank is Kone ywa, a village of about 250 small houses

MYO-THOO-GYEE—

The governor of a district He exercises a limited judicial authority within his jurisdiction, and is always answerable for the conservation of peace Appeals in most instances he from his authority to that of the provincial officers In civil cases he tries all causes subject to appeal, but in criminal ones his authority is limited to inflicting a few strokes of a rattan, he can neither imprison nor fetter In all cases of any aggravation, it is his duty to transmit the offender to the tounng hmoo (sheriff or executioner) of the provincial town.

N

NABEH GWA—

A village east of the Irrawaddy, and $4\frac{1}{2}$ miles north-east of Leh-dee the country between these two places is cultivated and fenced in

A road leads north-east to Leh thit, $\frac{1}{2}$ mile from hence, at 2 miles there is a zayat on the right side of road, and a tank close by On the left side of the road is a village called Ta-woon-bo

NA-LAIN—

Messengers attached to each court and public officer

NAM-BAK—

A Muluk village between Assam and Mogongng, situated on the Nam bak rivulet and fortified with a strong palisade

NAM-BOKE—

A river

NAM-BOKE—

A village in the Hotha valley about 3,700 feet above Bhamo and nearly 600 above Hotha

NAMKHONG—

A river

NAM-MALEE—

A tributary of the Irrawaddy from the east (see *Nam-thabel*)

NAM-MAY-OW (VALLEY)—

The valley of Nam may-ow, better known as the La-show valley, is at an elevation of 2,400 feet above the sea-level, and 750 feet above Ban-zay Captain Watson's camp here was in lat $22^{\circ} 58'$ and long $97^{\circ} 30'$

NAM-MINE—

A river, about 7 miles from Nantun

NAM-PAN—

Or Ben choung as the Burmans call it, is one of the largest rivers in the Shan states Where met in the north it is a deep stream, and must be quite a river during the rains, running over a pebbly and sandy bottom, but at Kong hay it is spread out as a shallow lake, nearly $\frac{1}{2}$ mile broad in places, with low banks and islands covered with trees and jungle, its water, though beautifully clear and of uniform depth throughout, has a peculiar blue colour, arising probably from the large amount of salts of lime in solution, the whole surface of its bed is of calcareous deposit The current here (Kong hay) is scarcely perceptible, but where the water flows in there are broad interrupted falls of several feet on either side of a small island "I was informed that the river retains the same lake-like appearance for a long way to the south, interrupted only here and there by falls, and that it joins the Salween near the town of Monay"

—(*Watson, 1865*)

The village of Kong-hay above mentioned is in lat. $21^{\circ} 23'$, long $98^{\circ} 7'$

NAM-PAT—

A village There is much cleared ground about this village Few water-courses All the drainage of these parts seems to be into hollow and underground passages From Nam-pat there are no hills visible for a long way in front

NAM-POUNG—

This stream is quite a rivulet at Ban-zay, running very swiftly over its pebbly bed between high banks about 100 feet apart The broad valley of this stream is at a lower level than any which Captain Watson saw in the

Shan country, being only about 1,660 feet above sea-level. It comes from the north-east, and from Ban-zay goes on in a westerly direction. After receiving the water of the Nam-ma, and another stream called Nam-poo, it is said to join the Myit-ngay near the town of Thee-baw. Gold is said to be found at a place called Mien loon-sop near Ban-zay in this stream. —(*Watson, 1865*)

NAM-SA—

This stream flows through the valley of the same name, runs close to the southern hills in a deep channel which it has cut out for itself in the dark-blue, almost bituminous, clays, which, in a great part constitute the surface of the valley and of the spurs to the north. The valley is about 1 mile to $1\frac{1}{2}$ miles broad and 25 miles in length, and is closed in at its western end by a sea of rounded grassy hills covered with the common bracken, through which the Namsa finds its way to precipitate itself down a steep valley in the Kachin hills to the Taping, half way between Ponsee and Man-wyne. The eastern end or head of the valley is shut in by a transverse ridge about 400 feet high, connecting the parallel ranges which define its sides. A great part of the ends of spurs from the north range have been washed away by the Namsa, and the level land that has been left consists of a rich black loam on which the rice crops are raised. The red spurs are chiefly devoted to the cultivation of tobacco and culinary vegetables.

NAM-SANDA—

A tributary of the Taping river

NAM-TABET—

Tributary of the Irrawaddy, from the east. Up this the Nam-malee Kadoos and Chinese Shans live. They are subjects of the Kan-loung king. The former pay taxes to Burma. They grow opium. The Kachins about here obtain lead ore from the hills. They take the lead to Bhamo.

There is a road to China from Nam-tabet, by which merchants bring cloth and iron cooking pots. Above Nam-tabet there is a plain occupied by Kamptee Shans.

They are emigrants from near the western source of the river. Further on is passed the Kadoo village of Maing-maw. It is said to have been an important city. Old paddy clearings still remain, also the ruins of a fort. There are at present 20 houses of Kadoos and 5 of Kachins.

NAM-THABET—

The Nam-thabet flows out of a small gorge spanned by a rickety bamboo bridge.

NAM-TSO-NGAN—

A small stream, which divides the Mempon from the Whopong district.

NAM-TSOO—

Is a large town of perhaps 250 houses, in a territory capable of affording subsistence to a large population. —(*Richardson, 1836*)

NAM-TWEEN—

A stream beyond Monay

NAN-GOO-SAN—

A Shan village in the Thuen-nee district, lat $22^{\circ} 33'$, long $97^{\circ} 35'$

NAN-KWAI—

A village on the route from Yemay-then to Thuen-nee, a good halting place. —(*Watson and Feilden, 1864*)

NANTIN—

This place like others is partly ruined, and has been so for some time. The long ridges of grass and weeds are the only indications that mark the position of once-crowded streets and thoroughfare, the sites of houses being marked in the same manner. At least half of the town is in ruins, the remaining portion is divided into two parts, the eastern being occupied by the Panthays, the other by the Tartar Chinese, these last being the representatives of the trading and agricultural portion of the community, the Panthays doing all the fighting. There are from 40 to 50 shops, in which is a fair display of articles of trade peculiar to Chinese wants. All these shops are in the principal street. The contrast between Nantin and Maantee, which is only about 2 miles off, is most marked. In Maantee the houses are all left intact. The sawbwa is allowed to remain and govern his little town and district unmolested. The reason assigned for this is, that, when the Panthays overran the country, all the towns that resisted them were destroyed, but those that surrendered and paid tribute were allowed to remain. Nantin was one of those that offered resistance and suffered accordingly. From hence the roads lead into the Hotha and Sanda valleys, and the town is rendered important on that account. It contains at present a mixed population of about 4,000 inhabitants, it is situated on the left bank of the Lawo, which flows about a quarter of a mile off, and the wall round the place is in a state of decay.

The town is occupied as a frontier station, being on the direct highway to China, and from its local position the garrison attempts to hold the numerous bands of dacoits in check, who make frequent descents on the plains, having their hiding places in the hills on each side of the valley — (Anderson)

NATTIT—

A large village 3,300 feet above sea-level, lat $21^{\circ} 15'$, long $97^{\circ} 8'$. From Nattit there are two roads to Lay-deah. The one to the north called the monsoon road ('Modwinlan') ascends the side and winds along the top of the great watershed till arriving at the latitude of Lay-deah. It makes a very precipitous and long descent to the Nam pon at Nam ben ywa, then without crossing the road bends round northward, and turning to east passes over three minor ridges of hills into Lay-deah valley.

The direct road leaves east-north east from Nattit, passing over a series of hills by more gentle ascents and descents, though much intercepted by streams that render this road impracticable during the rainy season — (Watson, 1866)

NAY-GEA—

It contains about 60 houses, and is situated on the confines of Nyoung-yue territory.

NAY-ZA-GIN—

A village on the road from Yemay-then to Nyin-gyan. The road leading to this from the north is very sandy and heavy — (Buxall, 1882)

NEMPHAN—

Is a stockaded village, and a few hundred yards to north-east of it is another called Tubone. Both are on the right bank of the Namturoom, which is a large stream, 270 yards broad. The volume of water is considerable, the rapids are moderate, it is navigable for the largest canoes. On the right bank there is an extensive plain running nearly north and south. No part of it seems to be cultivated — (Griffiths)

NIN-GAN-GOON—

A village near Yemay-then There are several large pagodas here. A good deal of paddy is cultivated, and there are plenty of cattle The jungle here is larger and shows that the ground is good South-east of the village is a small swamp, and half a mile from this is a large brick pagoda that would furnish bricks enough to build a causeway across it.—(*Boxall, 1888*)

NOA-JEE-REE HILLS—

The hills are represented as being rather less elevated than the Ungeching, at those points where they are crossed on the route to Mogoung, and their breadth must be equally inconsiderable, as the passage across them is effected in one day They are covered with forest and bamboo jungle throughout their whole extent, and the streams falling from them on the east and west into the Moo and Ning-thee are numerous, but small

The second valley is that which is bounded on the west by the Noa-jee-ree hills, and on the east by a range called the Shway-meng-woon-toung, which is represented in the Shan sketches as extending from old Beesagaon (the Beeja-noung-ywa of the Burmans) nearly in a south-westerly direction to the north of Kenoo, where it makes a sudden inflection to the south-east and terminates on the right bank of the Irrawaddy river Between the western foot of the Noa-jee-ree hills and the small range which runs along the left bank of the Ning-thee, the villages are described by the Shans as being tolerably numerous, and the country generally well cultivated The sál forests, which prevail so universally in the Kuba valley, are also found here, though far less generally, and the gurgan and teak appear to grow in more equal proportions.

The northern portion of this valley is intersected diagonally by the Mera-shway lee river, which, rising on the eastern side of the Noa-jee-ree hills, penetrates the defiles of the Shway meng woon-toung range, and falls into the Irrawaddy between Choung-doung-myo and Thee-young-myo, both of which towns stand on the western bank of that

River Moo.

river The southern portion is watered by the Moo river, whose sources appear to be situated in an inferior branch on the western face of the Shway-meng-woon-toung, from whence it flows nearly due south to the Irrawaddy, crossing in its course all the great lines of land communication between the capital and north-western provinces of the Burmese empire The volume of this stream is very inconsiderable, and it is only navigable for a small class of boats, except during the rains, when it runs with great velocity

NOUNG-LOW—

A large village about 18 miles south of Yemay-then on the road to Nyinyan

The road leading to it from the north is bad, being in parts sandy, and in others over rough paddy land

The water-supply is good, and firewood plenty There is a fine view of the mountains to the east, and to the west rising land is to be seen

The soil is sandy and stony, and where there is jungle, it consists of eng and scrub —(*Boxall, 1888*)

NOUNGSA—

A lake in Chinese territory so large that it cannot be seen across The people at Kaoho speak of the eastern branch of the Irrawaddy as Inmyit ('lake river') This is because that branch takes its rise in the

Noungsa lake There are said to be no hills near this lake, which appears to be on an elevated plain. The distance to Chinese territory from the Irrawaddy is said to be six marches. The eastern branch of the Irrawaddy is called by the Shans 'Myit-ngay,' or 'little river', the western 'Myit-gyee,' or 'big river'. The Kachins call the two branches Meh-ka and Malee-ka.

Road.

The roads are very good and made to zigzag up steep hills

NOUNG-TA-LAW—

A village of 20 houses on the left bank of the Irrawaddy in lat 25° 26', long 97° 4'

NOUNG-TA LAW—

A village of 20 houses on the Upper Irrawaddy, lat 25° 20', long 97° 4'

NUBBIEN—

A very large village on the road from Myin gyan to Nyin-ghan. It is surrounded by a stockade made of thorny bushes. The water is brackish, and is procured from wells outside the village — (*Bozall, 1882*)

NYIN-GYAN—

This town is open and straggling, and contains about 3,000 houses and a population of 15,000 souls. It is the head-quarters of the woon of Nyin-ghan, and is a tolerably thriving town.

Supplies.

Food supplies are plentiful, and also bullocks for transport.

The surrounding country is fairly populated, and rice is cultivated to a considerable extent — (*Strover, 1881*)

It consisted of 900 houses in 1865, and there was a market every five days. It is situated on the south side of the stream, which is higher than the north. The road from the frontier is very sandy, and is in the rains covered in some places with 2 or 3 feet of water. It passes through extensive forests of en and teak. — (*Watson, 1864-65*)

NYOUNG-OO—

Is a large and busy village, 3½ miles north of Pagan. It is of considerable commercial importance. The population is about 3,500.

There is a famous pagoda called Shway zee-gone here, and a guard of a few men to look after some jewels of the late queen kept there.

This is the chief seat of the manufactory of lacquered ware, of which a large quantity is exported up to the capital and down to British Burma.

Manufactures.

Boats.

Boats of all sizes lined the shore here for nearly a mile — (*Yule*)

A road leads from hence to Yay-dwin-gone, 1½ miles to the north-east.

Communications.

At one mile from Nyoun-oo this road meets the telegraph road — (*Native information*)

Above Nyoun-oo the sandstone cliffs again appear, rising boldly from the water to a height sometimes of 130 feet or more and broken by frequent inlets. The waters when at their highest level (about the end of August) fill the winding gorges, and above the wooded banks rise groups of ancient temples. In one projecting ridge of sandstone there is a tunnel, apparently natural, through the wall of rock, admitting the passage of a rude staircase descending from the village behind. Close to this in the soft sandstone cliff overlooking the river are fine caves. — (*Yule*)

All the eastern shore for many miles above this is beautifully wooded and thickly set with palm groves, villages, and surrounded by hedged fields and occasional pagodas. The land rises behind in a long general slope, broken by ravines towards the lower ground that fringes the river, but more clothed with wood or brushwood than the country further south, though still apparently unproductive.

The river here during flood is about 5 miles broad, but much of this is only a shallow spread of inundation. Many islands, with houses on them, just emerge from the surface and no more, whilst other small villages or groups of cottages rise on their stilts directly out of the water with no visible land beneath them at all.

This is the head-quarters of a woon and a steamer station.

Cultivation. The principal crops are paddy, maize, cotton, palm, and beans.

Stock. As follows —

Ponies	Enough for inhabitants.
Bullocks about	800
Goats ,	50
Pigs over	300

Transport.

The following transport is available —

Carts (bullock), about	200
Boats, about	20 of 400 to 500 baskets.

Supplies.

Mutton, pork, fowl, fish (dried and fresh), ngapee, onions, peas, beans, rice, paddy, oil.

Inhabitants.

There are a few foreigners, the rest are Burmans.

The streets are straight and 30 or 40 feet wide, no open spaces inside.

The houses are small, of timber and bamboo.

The land on the north is bad, being very much cut up with ravines. On the east there are kyoungs on a piece of high ground. On the hill, where the pagoda Shway-zu gone stands, the ground is level, and the southern portion will hold about 1,000 people.

There is a road 100 feet wide from this to Pagan. The telegraph wire runs along it. There is a little jungle on both sides.

About a mile from Nyounng-oo there is a steep descent, but after passing this, the road is level, passing over plains and fields up to Da-hat-taw, Zee-gyone. Close to the north of Zee-gyone there are some pagodas and kyoungs on a piece of ground large enough to camp 4,000 people — (*Native information, 1879*).

NYOUNG YUE—

Contains from 150 to 200 miserable houses. The site of the town is a dead-level, and was formerly the bed of a lake, which has now shrunk away about 3 miles to the southward, and fills the end of the valley about 12 or 14 miles north and south, and $2\frac{1}{2}$ or $3\frac{1}{2}$ miles wide between the ranges which enclose the valley.



ONADAR—

A village on the road from Yemay-then to Nyin-gyan. The road leading to it from the north passes mostly through forest. The Nyin-gyan forest commences here and increases in thickness as you travel south — (*Basall, 1882*).

There is another village of the same name about ten miles further south on the same road. The road sandy and very heavy

ONE-HNEH-KONE—

A village on the left bank of the Irrawaddy between Let-toke and Ma-gyee-zouk, about a mile from Thayet-kone

OUK-HNIN (L)—

A village $1\frac{1}{4}$ miles north of Tagoung-deh. It is also called Pa-pyno. Indian-corn is chiefly cultivated

P

PADO-GOUNG—

A fair sized village on the road from Yemay-then to Nyin-gyan. It is close to the bank of a wide river. The bed was sandy and 100 yards wide and dry in February.—(*Boxall, 1882*)

PAGAN—

This city is situated on the left bank of the river. It is said to contain 7,000 inhabitants, and is the ancient capital of Burma. The ruins of old ramparts are still to be seen.

This place affords one of the best defensive positions on the river, it can be easily defended. There are plenty of materials at hand for the construction of new works, the old pagodas can be used as storehouses, magazines, and barracks, and its position on an elbow of the river is favorable as a site for a fortified position.*

In advancing to Pagan the river is excessively wide, extending sometimes to a breadth of four miles, with many islands. The east bank is very picturesque, never rising more than forty feet, but constantly dipping into hollows well wooded with noble trees and villages with groups of palms. On the western shore are barren hills, but the islands at their base are green and woody.

Pagan was destroyed in 1284, under the following circumstances. An ambassador of the emperor of China having been murdered by the Burmese king, a Chinese army was sent to invade Burma.

History

Narathee-ha-padé was at that time king, and to strengthen the defence of his capital, he pulled down for the sake of the materials 1,000 large arched temples, 1,000 smaller ones, and 4,000 square temples. But under one of these he found a disagreeable prophecy, and losing heart, he left his capital and fled to Bassein. The Chinese advanced, occupied the city, and continued to pursue the Burmese army as far as Taroup-myo, or Chinese point, a considerable distance below Prome.

Marco Polo alludes to this conquest of Burma in a very off-hand and contemptuous manner, and relates how, when the great Khaan had a mind to subdue the city of Mien, he sent a valiant captain and an army chiefly composed of jesters, with whom his court was always furnished. The Burmans with their usual splendid mendacity have enlarged this into an army of six million horse and twenty million foot. It appears that the Chinese invasion took place by the route still used by most Chinese traders coming to Burma.

* The soil is very dry, the place level and favorable for building; and although the immediate neighbourhood is barren, the opposite side for a great way up is remarkably fine.

It was among the ruins of the ancient city that the last Burmese army, under Naweng-cheyen, "prince of darkness," made their last stand on the 9th February 1826

On the 9th the British column, considerably under 2,000 fighting men, moved forward in order of attack, the advance guard was met in the jungle by strong bodies of skirmishers and after maintaining a running fight for several miles, the column debouching into the open country, discovered the Burmese army from 16,000 to 20,000 thousand strong drawn up in an inverted crescent, the wings of which threatened the little body of assailants on either flank. The British commander pushed boldly forward for their centre, which was vigorously attacked, and instantly overthrown, leaving the unconnected wings severed from each other, and requiring the utmost activity on their part to reach a second stockade which had been prepared under the walls of Pagan. The British column followed up the enemy's retreat with the greatest celerity, afforded them little time for rallying in their works, into which they were closely followed by our troops and again routed with great slaughter. The whole army, except 2,000 or 3000, thousand men, was routed on the spot, and the unfortunate "prince of hill" had no sooner reached Ava than he was most cruelly put to death by order of the king — (Snodgrass)

The ruins of Pagan extend over a space of about 8 miles in length and averaging 2 miles in breadth. The present town of Pagan stands on the riverside within the decayed ramparts of the ancient city near the middle length of its space.

This brick rampart and fragments of an ancient gateway are the only remains at Pagan which are not of a religious description.

Yule gives the number of the temples at 800 or 1,000. All kinds and forms are to be found amongst them. Three at least of the great pagodas and a few of the smaller ones have from time to time been repaired, and are still (1855) more or less frequented by worshippers, but by far the greater number have been abandoned, and some have been turned into cowhouses by the villagers.

Many of these temples could doubtless be used for military purposes. The largest will therefore be described.

The most remarkable of these is the temple of Ananda. "This is in plan a square of nearly 200 feet to the side, and broken on each side by the projection of large gabled vestibules, which convert the plan into a perfect Greek cross. These vestibules are somewhat lower than the square mass of the building, which elevates itself to a height of 35 feet in two tiers of windows. Above this rise successively diminishing terraces."* The building internally consists of two concentric and lofty corridors, communicating by passages for light opposite the windows, and by larger openings to the four porches. Opposite each porch, and receding from the inner corridor towards the centre of the building, is a cell or chamber for an idol, upwards of 30 feet in height. There are gates to each of these chambers 24 feet high, with frame bars nearly a foot thick.

The lofty vault in which the idol stands is nearly 50 feet high, and reaches into a second terrace of the upper structure, and a window pierced in this lights it up.

The temple is surrounded by a square enclosure wall with a gate in each face. That to the north is the only one in repair.

The outer corridor is roofed with a continuous flying buttress, or half pointed arch. The inner corridor and cells are pointed vaults.

Nearly all these temples are built of brick, cemented with mud only — (Yule)

They are built with a care and elaboration of which the Burman of the present day seems remotely incapable of in brick work of any kind.

On the outside at least of the better buildings every brick has been rubbed to fit with such nicety that it is difficult, and sometimes not possible to insert a knife between the joints.

The second great temple of Pagan is the Thapinyu, "the Omniscient."

Thapinyu.

It is stated to have been built by Alaung tsee-chyoo-meng about the year 1100 A.D. It stands within the ancient walls some five hundred yards to the south-west of the Ananda. Its general plan is not unlike the Ananda. The body of the building forms a massive square of more than 180 feet to the side. The characteristic of Thapinyu is the great elevation of the mass before considerable diminution of spread takes place, and the position of the principal shrine high above the ground.

First there is a spacious two-storied basement like that of Ananda, then two receding terraces, the third terrace starts to a height of fifty feet. Within this is a lofty vaulted hall opening by pointed gateways east, north and south.

The Gauda-palen is the third and last of the greater temples which have been kept in repair, it was built about 1160

Gauda-palen

It is within the city walls, but stands on lower ground than the other two, it is also nearer the river. It is more compact and elevated in comparison to its bulk than the two former buildings, but resembles them in general character.

The hamlet of Wagarayu is mentioned by Buchannan as part of Pagan, it is situated on both banks of a stream called the Shway-choung, or 'golden stream.'

Vicinity of city

The Pali name of Pagan when it was the residence of kings was Aremattana.

South-south-east of Pagan is the village of Maynauzu or Maynando, on the road to Thawayndain. All the way to it the road ascends gently, and the ground, though dry and

Village of Maynauzu.

sandy, is smooth, and affords both pasture and a good many fields for cultivation. The crops are chiefly maize and cotton—both very thriving. There is a large pond here with rising banks, and here the temples cease towards the south-east, but vast numbers are to be seen towards the north between the village and Nyoung-oo.

In the construction of all the temples above described a striking peculiarity is to be remarked, *viz*, that the great bulk of

Pagodas.

the temple is, or appears to be, a solid mass of masonry. All ancient temples have been built with the distinct purpose of being used either as tombs or idol houses, and amongst the Burmans the custom of concealing treasure and gold and silver images of Gandama has prevailed. Snodgrass writes touching this subject "Vast sums are annually expended by the monarch and his court in building and gilding pagodas

in the middle of which images of Gaudama made of solid gold are frequently buried, particularly in the splendid and very sacred buildings of this description in the neighbourhood of the capital."

It is not therefore improbable that if these centre blocks were pierced, they would be found to be hollow

Pagan stands on a high bank or flat consisting of soft earthy sands and pebbly layers, occasionally cemented by lime, and then forming concretionary masses or pseudo-stalactitic concretions. The pebbly layers are generally ferruginous and cemented by the peroxide of iron into hard conglomerates, which on the exposed face of the steep bank often stand out boldly from the general surface, the softer beds being washed away. This conglomerate occurs in two or three distinct beds or layers, which, however, are not continuous, dying out and again coming in after an interval. The same character prevails for some miles along the river banks, from the bold and commanding point of Lozah nundah upwards past the old and present town.

From Lozah nundah there is an excellent view of the Tang-gye range of hills. Bare and very thinly wooded, their tops slope away gradually to the south-west, in a succession of lines parallel to each other, while bold scraggy scarps face the east.

These hills are composed of a series of shales of bluish grey colour, with thin but tolerably regular beds of sandstone intercalated, above which comes a succession of thin bedded sandstones, with their partings of shales or clays. This sandy character is persistent to the top and back towards the west.

The thick beds of blue clay or shale form about one-third of the total height of the hill, the sandstones the remaining two-thirds, the hill being altogether about 1,100 feet above the river level. Near the summit there is a thick mass of sandstone (40 feet) which forms a marked scarp under the temple.

Along the more level ground at the base of the hills near the river the rocks are composed of bluish calcareous sandstones, associated with bluish clays or shales, and some more gritty layers.

To the north-east of the hill is seen the immense spread of flat country through which the Irrawaddy winds its course, only broken by a few low hills on the horizon.

To the east the Thayo-wendine range is seen behind Pagan standing up boldly from the great plains which stretch southwards to Seengoon. To the west the Tang-gye range drops by the successive falls of the outcropping beds into an undulating country through which the Yau river winds towards the south, and the same general undulating and broken jungle clad country stretches away to the north-west and west, as far as the eye can reach.

The series of rocks forming the lower portions of these hills is obviously the same as that in which the petroleum wells at Yaynan-gyoung are situated, and on examining some of the ravines here traces of this earth oil oozing out and impregnating the masses may be seen in several places. Mr Oldham, who examined this spot, thinks "there is little doubt that this petroleum will hereafter be found to exist here in sufficient abundance to repay its extraction. In their lower beds also occur similar thin seams and layers of selenite."

Proceeding northwards from Pagan, low cliffs of sands and pebbly beds extend along the eastern bank, broken up by many small ravines and little creeks. They occasionally form almost perpendicular banks 120 to 150 feet high. The swelling banks above are studded over with small scrubby timber, and intersected by little ravines, in which the wooding is rich and the foliage luxuriant. The deep shades of these patches of vegetation contrast beautifully with the warm tints of the steep banks.

A short distance above Nyoung-oo the banks become low and wooded, at first studded at intervals with scattered palms, and afterwards with large groves. Little villages are embosomed among the trees, and the tall and graceful roof of the phoongyee houses rises above them. Low banks (ten or twelve feet) of bluish clay are here and there exposed by the cutting back of the river, but the whole country is low and like a great delta. The river channel also becomes broken up by low grassy islands. Behind at some distance the country rises into a series of waving wooded hills of no great elevation,—long swelling undulations all covered with cultivation.

This low wooded and delta like character stretches to the north here for many miles past Koon-ywa, Myin gyan, Samaik-gon, and Yandaboo, and is the results of the great deposits formed by the junction of the Chin-dwin river with the Irrawaddy.

The river winds through a succession of islands and sand banks occasionally sufficiently raised above the floods to be inhabited and wooded. The old and permanent bank of the river can be traced along behind these flats, and is marked by a line of villages and a few spires, while still further eastward the ground rises with a swelling broken outline. The banks are covered with immense groves of palmyra palms (cultivated for the manufacture of sugar), or assume a more open park-like character with lofty trees, and the whole country as far as seen is very much richer and more fertile than any part between this and the British frontier—(*Oldham and Fule*, 321)

The country from Pagan to Ava is most beautiful,—extensive plains of the finest land watered by the Irrawaddy, interspersed with every green woods, only sufficiently large to give beauty and variety to the scenery, and the bank of the river so thickly studded with villages and pagodas, temples, monasteries, and other handsome buildings, as to give under one coup-d'œil all the charms of a richly varied landscape, with the more striking beauties of a populous and fertile country.

Near Pagan is a small range of hills called the Thay o-wen-dine. A tolerable road, evidently one of considerable traffic, leads from the town close to the northern base of the hills, and proceeds thence to "Puppa" (hill) through an undulating dry country, all under cultivation,—maize, sesamum, &c. From the most northerly point of this the top of the range is seen stretching away to the south in a succession of sharp points and narrow topped ridges, presenting to the east a steep and sharply scarp'd face. Parallel to the main ridge and about 150 yards from the base is a smaller line of hills, raised not more than 150 to 200 feet on their highest points and stretching away in parallel and regular line.

Between these and the Irrawaddy a gently swelling flat of cultivated ground, with a few scattered trees and patches of low coppice, intervened, cut up by watercourses, which mark the channels of the torrents which occasionally rush from these hills.

"Towards the east and north the country presents exactly the same character, stretching away to the lofty hill of Puppa which rises in the distance

"The Thay-o-wen-dine range is composed of soft earthy sandstone with some flaky beds and thin slaty layers. A few calcareous nodules and beds also occur

"The range is divided across the centre by a deep gorge, through which a stream called the Tonng-boung-wa flows from the east and empties itself into the Irrawaddy at the village of Tueng-wa below Logah-nundah. This is dry during the cold weather. Close to the northern end of the range is the large wide bed of another stream called shway-choung, which falls into the river at Nyoung-oo village

"To the south of the Tonng-boung wa-gap, the general direction of the range is slightly diverted to the east, and there seems to be a line of disturbance crossing the ridge just here"—(*Yule*, 238)

Dr Oldham, who accompanied the Mission to Ava in 1855, relates a curious instance of the sudden rise of the streams joining the Irrawaddy after only a short period of heavy rain.

"During this night (October 25th 26th) a heavy fall of rain occurred. There had been showers at intervals during the day, but heavy rain commenced at about 2 o'clock A.M. on the 26th, and in less than two hours after the widespread sandy bed of the stream over which we had walked dry in the afternoon was covered with a rushing torrent. It came down suddenly, swept away all the huts which had been erected close to its banks, and broke loose the boats which were at their moorings at the mouth of the river. This sudden and tremendous rush which came down like a torrent afforded a capital instance explanatory of the cause of one very peculiar feature in the country of Burma. Everywhere wide large riverbeds are seen, often several hundred yards wide, but for the most part perfectly dry. Occasionally a little trickling rill slowly glides along in the midst of a great expanse of sand. And apparently there is no sufficient force to produce these large channels. But such a torrent as came down on this occasion amply explains the real state of the case"—(*Yule*, 339)

Cultivation	Paddy, cotton, maize, sesamum, and sugarcane are grown here		
Stock	Ponies—sufficient for the inhabitants	Goats—about 50	Pigs—about 300
Transport.	Carts—about 150	Bullocks—about 400	Boats—about 30 of 500 to 600 baskets
Supplies.	Mutton, rice, fish, ngapee, pork, salt, onions		
Inhabitants.	There are 5 or 6 Chinamen, and the same number of Indians, the rest Burmans		

This used to be a steamer station, but sandbanks now render it inaccessible

"The streets are straight and from 80 to 100 feet wide. There are many open places inside

"The south and east sides of the town are closed with brick walls from 12 to 15 feet high. The town will hold about 4,000 people

"The houses are small, and built of timber and bamboo. The outskirts on the south and east sides are open plains, with many pagodas. About 600 feet beyond the walls on the east is the big Ananda pagoda. The walls

surrounding this pagoda are about 1,000 feet long on each side and 8 feet high with gates, and would hold about 800 people. From one to two thousand persons could encamp between the inner and outer walls of this place.

"There is a good road from Pagan to Yatha. It runs south, and is about 100 feet wide. The telegraph wire runs along this. South of Pagan and close to it is the large village of Thapan-gyoung, good camping ground."—*(Native information)*

Pagan is situated on a salient bend of the river, and would make a good station for troops. There are plenty of bricks for building purposes.

PAI-MA-LWOK—

A village in the Ka-tha district. In 1837 there were 15 houses — *(Bay-field)*

PAING—

A fair sized village on the road from Myn-gyan to Nyn gyan, 38½ miles from the former town. The water-supply is from two wells. A considerable amount of rice is cultivated, and all around are great quantities of toddy palms.

PAKHAN-NGAY—

A town on the left bank of the Irrawaddy in lat 20° 45', long 94° 50'. It contains about 2,000 inhabitants. Below this town the bluffs of sandstone cease, and are replaced by a more gently swelling country, with somewhat more of wood and fallow fields enclosed in dry thorn hedges. Above Pagan-ngay the character of the river changes, the banks being of clay without visible rock.

One and half miles north-west of this is the village of Ywa-ngay-kan, connected with it by a cart road.

PA KWET—

The public executioner. An odious system prevails in Upper Burma of uniting in the same person the offices of gaoler, constable, and executioner. This person is usually a criminal pardoned on consideration of his performing these duties for life. He is called Pa-kwet (cheek-circle), from a circle which is branded on each of his cheeks on his undertaking the office. These people are considered as outcasts, and when they die are denied funeral rights. According to Crawford, these men are called *Toung-hmoo*.

PAKO-KO, MYIN-THA—

These two form one continuous town on the western bank of the Irrawaddy, and seem to stretch for three or four miles — *(Yule)*

It is the head-quarters of a woon, and is in the district of Pakhan-ngay.

Cultivation. Paddy, cotton, sesamum, maize, peas, and beans are cultivated here.

Supplies. Rice, a few fowls, paddy, pork, oil, peas, and beans.

Transport. Carts—about 200. Bullocks—about 250. Boats—about 26 of 400 to 500 baskets.

The houses are small and of timber or bamboo. There is an open space on the east that will hold about 4,000 people. A road leads from the southern side to Kyouk-jay-myo.

PA LAW—

A village of 20 houses on the right bank of the Irrawaddy.

Inhabitants. Shans. The village contains Shan Tarokes or Chinese. The men wear trousers like the Chinese, black jackets and black turbans, the women wear black clothes like Loneyes. They build their houses of mud. All hands

drink liquor They speak Shan and Chinese They have two sects of clergy,—one, the "Forest Church," behave like Burmese priests, the other, "Feast Church," eat rice morning and evening, drink spirits, and eat

opium.

PALIN—

A village $5\frac{1}{2}$ miles north-east of Nyoung-oo, consists of two parts, each of 30 huts, about a mile apart. Population about 300

PALOUNGTE—

A village of 20 houses in the Kachin hills of the Senna Kachins.

PAN-LOON—

A valley, is situated beyond the Tonng hla district

PAN-LOUNG—

A river which joins the Myit-ngay, Irrawaddy, and Pong-loung or Sit-tang river

PANTHAY—

A name given to the Mussulman inhabitants of Yunnan There are several theories as to the derivation of this term, Garnier says the word 'Pharse,' which the Burmans have corrupted into 'Panthay,' is the same as 'Pharse,' which in India is applied to Mahomedans

Sir T Wade derives the word 'Panthay,' from a Chinese word 'Pun-tai,' signifying the 'aboriginal or oldest inhabitants of a country'

Mr Baber writes thus "The word 'Panthay,' has received such complete recognition as the national name of the Mahomedan revolutionaries in Yunnan, that I fear it will be almost useless to assert that the term is utterly unknown in the country which was temporarily under the domination of the Sultan Suleiman, otherwise Tu-win-sen The rebels were and are known to themselves and to the Imperialists by the name of 'Hui hui' or 'Hui-Tzu,' the latter expressions being slightly derogatory

"The Mahomedans of Yunnan are precisely the same race as their Confucian or Buddhist country men, except that they abhor pork They did not practise circumcision, they did not observe the Sabbath, were unacquainted with the language of Islam, did not turn to Mecca in prayer, and performed none of the fire and sword spirit of propagandism They are intelligent, courageous, honest, and liberal to strangers

"The rebellion was at first a question of pork and nothing else, beginning with jealousies and bickerings between the pig butchers and the fleshers of Islam in the market places The officials who were appealed to invariably decided against the Mussulmans Great discontent ensued and soon burst into a flame

"The first outbreak seems to have originated among the miners,—always a dangerous class in China, who were largely composed of Mahomedans

"The usual measures of exterminative repression were adopted by the officials, and a general persecution ensued The Mahomedans made common cause, excited possibly by their travelled hadjis, and so began the revolution in Yunnan"—(Baber)

The Mahomedans have from ancient times formed a considerable portion of the population of Western China Mahomedanism was little known among the Tartars before the time of Jhengis Khan, but his conquests were the means of bringing a considerable population of Yigurs into Shensi and Kansu, and the faith of the Prophet had spread among this tribe long before the Tartar conquest of China

Marco Polo, in his description of the people on the western border of Shensi, where the celebrated mart of Singui was situated, and his account of Singan and Karajan, a part of Yunnan, describes the Mahomedans as forming a considerable part of the foreign population.

How strong a position this sect had obtained under the reign of Kublai appears from Marco Polo's statement, that the provincial governments were entrusted to Tartars, Christians, and Mahomedans. The invasion of Burma and the sieges of Singan and Lun ching were entrusted to Mahomedan generals. In the early part of the fourteenth century Rashid-ood-deen, Vizier of Persia, mentions Karajan or Yunnan province, and states that the inhabitants were all Mahomedans.

The Jesuit fathers in the seventeenth century made frequent mention of the Chinese and Mahomedans. LeCompt says that they had been six hundred years in the country undisturbed, because they quietly enjoyed their liberty without seeking to propagate their religion, even by marriages, out of their own kindred. They were regarded as foreigners, and frequently insulted by the Chinese.

In 1765-71 a rebellion broke out among the Mahomedans of the western frontier and spread to the province of Kansu. The rebels resisted the imperial forces with great valour, but were ultimately subdued. After this they became attentive to the care of extending their sect.

For this purpose they made a free use of their wealth in purchasing children to bring up as Mahomedans. During the famine which devastated the province of Kwangtung in 1790 they purchased ten thousand children from poor parents; these were educated, and when grown up provided with wives and houses, whole villages being formed of these converts. This system has been followed by them to the present day, so that large numbers of the Mahomedan population are of Chinese origin. Yunnan appears to have been the scene of almost incessant insurrections from 1819 to 1834, attributable in all probability to the Mahomedan element in the population.

The mixed populations of this province appear to have been always distinguished by an independent and insubordinate spirit, which often defied the central authority. Some towns were even governed by elective municipal councils only nominally ruled by the mandarins.

In the course of the present century the faithful appear to have multiplied in Yunnan more rapidly than in the northern provinces. Colonel Burney tells us that in 1831 almost the whole of the Chinese traders who visited the Burmese capital were Mahomedans, except a few who imported hams.

"As far as appearances go, there are strong traces of descent from a non-Chinese, and we may say Turkish, stock visible among the present Mahomedans of Western China."

The Mussulmans of Arab origin are tolerably numerous, and Garnier noticed that, although many were to be met with who preserved the ancestral type and the principal traits of Arabs in great purity, the majority could not be readily distinguished from Chinese, except by their superior stature, greater physical strength, and more energetic physiognomy. Although they only contract matrimonial alliances with those of their own creed, they commonly take Chinese women as concubines. Hence a large infusion of Chinese blood, notwithstanding which they have preserved almost all the warlike qualities of their ancestors.

The Panthays of Mowien are described by Dr Anderson as well made, athletic, and of a goodly height, the governor standing 6 feet 3 inches.

They were fair skinned, with high cheek bones and slightly oblique eyes, their cast of countenance being quite distinct from the Chinese — (Anderson — Garnier)

When the Panthays first broke out in rebellion, the Imperial authorities determined to rid themselves of these intractable subjects by a general massacre. This commenced at

Ho-ching, a town between Li-kiang-foo and Tali-foo, where upwards of 1,000 Mahomedans were murdered, while similar treacherous massacres followed in different places

A simple bachelor or literatus of Moung-ho, named Tu-win-sen or Dowin-sheow, a Chinese orphan who had been adopted by Mahomedans, rallied his co-religionists. His followers at first numbered only forty, but their ranks were speedily joined by fugitives from Ho-ching, Yung-foo, and other places, till with six hundred men he attacked the ancient and holy city of Tali-foo, which surrendered in 1857. The Mahomedans made it their head-quarters, and it seemed likely again to become the capital of an independent kingdom. The Mahomedans succeeded in occupying Yunnan-foo for a short time, but were expelled. In 1867 Tu win sen was proclaimed Sultan or Imam. Momien and the Shan states on the Ta-ping had been brought under the Mahomedan king, whose authority extended over a considerable portion of the province. In the beginning of 1868 the French found the government at Yunnan-foo administered *ad interim* by a mandarin of the blue button named Song, the viceroy Lao having recently died, and his successor not having ventured to assume the perilous post. The office of commander-in-chief was filled by Ma-ken, supported by a staff of Mahomedan officers, whose customs and physiognomy marked them as different from the Chinese. Lao-papa also resided in Yunnan, invested with rank and honors, as the religious head of all the Mahomedans — (Garnier)

It does not appear how this could be reconciled with the religious authority of Sultan Suleiman, and it is plain that the Mahomedans were themselves divided into two parties

Although the Panthays were merciless in warfare, they were desirous of establishing a firm and orderly government. In all cases their officers protected the passage of merchants, and dealt much more justly by them than the mandarins had been accustomed to do. This was admitted by the Chinese and Shans, who, though outwardly submissive, were at heart thoroughly opposed to the new régime

This was the state of affairs in Yunnan when the Sladen Mission was there. From this time it appears that the Chinese Government roused itself to the necessity of recovering its almost lost province

Whatever the real strength of the Mahomedans may have been in 1868, it is certain that they had gradually lost ground in 1869

In 1870, Lu-sueh-tai was the acknowledged leader of the Imperialist Chinese troops in the Momien district, and had invested Momien, but suffered a defeat. He soon recruited his forces, and levied contributions from the Shans and also from the Chinese merchants, both of Bhamo and Mandalay. Towards the end of the year Momien had been again invested by Chinese troops, but a Panthay force from the north had succeeded in throwing reinforcements into the city. Notwithstanding this, the Chinese force under Lu and Lu-kwang-fang and another officer pressed the place hard, but to no purpose.

The Imperialists seem to have poured troops into the province, and surrounded Yung chang with ten thousand men.

In the beginning of 1871 the northern districts were held firmly by the Mahomedans, and the city of Tali-foo was reported clear of Chinese troops.

The Imperialist troops were then attacking Yay-nan-seir, north-east of Tali-foo, and as they had guns served by three European gunners, the Mahomedans, though fighting with their usual bravery, suffered great losses, and could scarcely make head against them.

Thus there were three lines of attack—one army assailing Yung-chang and the neighbouring cities south of the line between Momien and Tali-foo, the main force advancing on the holy city itself, and Li-sieh tai with his troops pressing the siege of Momien, where the governor held out, though reported to have been severely wounded, and kept up constant communication with the Resident at Bhamo.

Fate of Yung-chang

By the end of 1871, Yung-chang had been taken by the Chinese, and Tali-foo was closely invested.

Around Momien constant fighting continued with varied success, but the Mahomedans were bravely fighting a hopeless battle against overwhelming numbers.

At this time the Sultan Suleiman sent his son and heir, Prince Hassan, to solicit aid from the British.

He reached Rangoon in disguise, and thence proceeded to England, where he arrived in the spring of 1872. Here he was treated as the private guest of the Government, and remained for some time in the country, but his errand was bootless. On his return to Rangoon he received intelligence of the capture of Tali-foo, the death of Suleiman, and the overthrow of the Mahomedan power. Prince Hassan proceeded on a pilgrimage to Jerusalem.

During his absence in Europe the Chinese generals had put forth all their power to capture the head quarters of the rebels. For some months the natural strength of the position, to which all the Mahomedans had retired, defied its assailants. Abundant provisions were stored in the granaries, and the garrisons, said to number 30,000 or 40,000 Mahomedans, were determined to resist till the last.

The chief minister of the Sultan was entrusted with the command of Shagwan, as the Burmans call the fort of Hia-kwang or Hsia-Kwan, and he was bribed to admit the Chinese forces and surrender to them the granaries. The artillery of the Chinese rendered it impossible for the Sultan to cope with them in the field. But he held out till provisions failed, and then approaching famine compelled him to enter into negotiations. He was led to believe that, if he surrendered himself, his people would be spared, and willingly agreed to sacrifice his own life for those of his followers. Knowing the fate that awaited himself and family, he administered poison to his three wives and five children, and having taken a dose himself, proceeded to the Chinese generals' quarters. On arriving there he was ordered to be beheaded, but he prayed for a glass of water. On this being given him, he said "spare my people," drank the water, and expired. His people were not spared, on the contrary, many thousands were massacred. Thence the Chinese army marched to Chun-ning-foo and Yin-chaw, which towns were successively captured, no quarter being given to the Mahomedans.

Momien and Woosaw still held out. The former was finally captured in May 1873, the strong south western gate having been successfully mined,

but the victors found no one in the city. The governor had bribed the officer commanding the troops to the north of the town to allow his few remaining followers to escape by night. He afterwards entered Hoothaw or Woosaw. This place was captured at the end of May 1874, but the governor and his principal officers succeeded in escaping to Chang-sa, a town south-west of Woosaw and eight days distant from Talo on the Irrawaddy.

Thus ended the Panthay rebellion, and in the middle of 1874 the Chinese authority had been thoroughly established — (*Anderson, &c*)

PAN-YA—

A village in the Singoo and Chouk-Myoung district. In 1837 there were 60 houses — (*Bayfield*)

PAN-ZON-KWE—

A village in the Ka-tha district. In 1837 there were 5 houses — (*Bayfield*)

PA-BOO—

A Kachin sawbwa of a village near Kacho (1879)

PASHEE—

A village in the district of Lay-dea-myo, lat 21° 13', long 97° 32

PA-SHENG—

A village in the district of Lay dea-myo

PATANAGÓ—

A village of about 50 small houses on the left bank of the Irrawaddy, lat 20°

The houses are mostly built of bamboo, a few of wood, and are roofed with thekkeh (a kind of grass) and palm leaves

Houses

The monasteries occupied by the Buddhist monks are about the best buildings

Population.

The population is from 250 to 300 inhabitants

Carts and cattle

Each house-owner, except perhaps three or four, has a cart and four or five bullocks, and six or seven cows

The principal products of the place are paddy, Indian-corn, and sesamum

To the south-east of the village lie two tanks said to contain fish

A good cart-road runs through the village and leads to the fort of Koolee-kne and Myin goon town. Tracks branch off this road, and lead to some monasteries and the river

Communications

There is a good landing place, and the bank is not steep

Landing

On the 29th December 1825 the British army halted at this place, directly opposite to Malloon, where the Burmese army, numbering 15,000 men, was entrenched. The Irrawaddy at this place is 600 yards broad, and the fortifications of Malloon built on the side of a sloping hill lay fully exposed to view within good practice distance of our artillery.

The principal stockade appeared to be a square of about a mile, filled with men and mounting a considerable number of guns, especially on the water face, and the whole position, consisting of a succession of stockades, extended from one to two miles along the beach.

At the specified hour of midnight the British camp was on the alert, and the men engaged in throwing up batteries opposite to the selected points of attack in the stockade. The heavy ordnance was landed during the night, and by 10 next morning 23 pieces of artillery were in battery and ready to open fire.

Shortly after 11 o'clock the fire opened from our batteries, and continued without intermission and with great effect for nearly two hours, by which time the troops intended for the assault were embarked in boats, under the superintendence of Captain Chadds, Senior Naval Officer, at some distance above the place, to ensure them not being carried past it by the force of the stream.

The first Bengal brigade, consisting of Her Majesty's 13th and 88th Regiments, under Colonel Sale, was directed to land below the stockade and attack it by the south west angle, while three brigades were ordered to land above the place, and, after carrying some outworks, to attack it by the northern face. Notwithstanding every previous arrangement and the utmost exertion of every one employed, the current, together with a strong northerly wind, carried the first brigade, under all the fire of the place, to its destined point of attack before the other brigades could reach the opposite shore, and being soon formed under the partial cover of a shelving bank, without waiting a moment for the co-operation of the other troops, led by Lieutenant-Colonel Firth (Lieutenant-Colonel Sale having been wounded in the boats), moved forward to the assault with great steadiness and regularity, and in a very short time entered by escalade, and established themselves in the interior of the works. "A prouder or more gratifying sight," says Captain Snodgrass, "has seldom been witnessed than this handful of gallant fellows driving a dense multitude of from 10,000 to 15,000 armed men before them from works of such strength that even Munnaboo, contrary to all custom, did not think it necessary to leave them until the troops were in the act of carrying them." The other brigades cutting in upon the enemy's retreat completed their defeat.

The delay that was made here enabled the British to collect cattle from the interior and supplies of every description for prosecuting the journey along a sacked and plundered line of country — (Snodgrass)

A road leads from hence to the inland town of Toung-dwin gyee (*Toung-gwen*)

Proceeding along the road from Patanag6 to Koolee-kone, at a distance of 4,350 paces, is a track which leads to the river, and a monastery on the west. This road is wide, and is not affected by the rains. Near the junction of the road and track (marked A in plan I) there are six monasteries and two *zayats*. Large numbers of troops could be quartered here. North west of this is a monastery.

The six monasteries above mentioned are presided over by the monk Shway-gyin Sagadaw and his disciples.

From this hill the fort could be reached by artillery, the distance being $1\frac{1}{2}$ miles.

The fort of Koolee-kone is described under that name — (*MacNeill, 1882*)
PA-TO—

A village $1\frac{1}{2}$ miles from Ywa-damike, consisting of two clusters of huts numbering about 60. Population about 300.

This village has a good camping ground, and the water-supply is good. There is a pagoda in the middle of the village.

PAONE-WA—

A Kachin sawbwa.

PAY-MEE—

A village in the Lamine district

PEE-O-GONE—

A small village on the road from Myin-gyan to Yamay-then, 86 miles from the former place. It is situated on a small hill on which are several pagodas.

Before reaching the village the stream of Pee-o-gone and some paddy fields are crossed. There are hundreds of cattle here, all over the plains.—(*Bosall, 1889*)

PEETAH—

A village on the route from Bhamo to Muang-mow by Paleung-to and Kwat-loon, lat $23^{\circ} 58'$, long $97^{\circ} 14'$

PEIK-THA-NO—

A village in the district of Singoo and Chouk-myong. In 1837 there were 50 houses —(*Bagfield*)

PEIN-NEH-DAN—

A village in the Ka-tha district. In 1837 there were 5 houses —(*Bagfield*)

PEN—

A village in the Kyan-hny district. In 1837 there were 30 houses —(*Bagfield*)

PEN-DAYAH—

A Shan district. The scenery in these parts, especially in the Pen-dayah valley, is about the most picturesque in the Shan states;—cultivated fields, open downs, and hillocks interspersed with bushes, the many villages with their kyongs encircled with jungle clumps, white and gilded pagodas clustered in the vales, or tapering upon the summit of every prominent point on the western hills that rise towards the north into a rugged mountain range, the azure mist of the valleys intervening—the whole makes up a very pleasing landscape

PEN-ZIN—

A village in the district of Monay

PHAN-KAY—

A village nearly 3 miles north-east of Manchee in lat $27^{\circ} 25'$, long $97^{\circ} 25'$. When visited by Captain Wilcox in 1826 it was strongly stockaded, and an interior palisade surrounded the Rajah's house

The road leading to it is over a perfect plain partially cultivated and prettily studded with clumps of trees and bamboos. The country is intersected by a number of little rivulets —(*Wilcox, 1826*)

PHYANEE—

A town on the Mema-shway-lee river

PIN-LAY-GYIH—

A village in the Singoo and Chouk-myong district. In 1837 there were 70 houses —(*Bagfield*)

PINNIER—

A large village in the district of Monay, lat $21^{\circ} 20'$, long $98^{\circ} 17'$

PIN-PA—

A Kachin village on the Irrawaddy

The inhabitants cultivate kaings and tonngyas, and grow poppies and make opium. Near this is the village of Sanka, and above these villages is a large plain on which Kantees have established themselves.

PIN-YWA—

A village on the Irrawaddy east bank, south of Kyauk-yay on the left bank of the Pin-ywa-choung. It contains about 1,000 inhabitants.

Jaggery is manufactured. The east bank is high and of sandstone formation. Country looks dry and barren.

PON-CHYOUNG—

A stream, running through a broad and fertile valley to the north, where it is joined by another stream and vale from the north-north-west, then bending round to westward its valley becomes irregular, and again to the south very contracted. From Myoung-ben and Bamway-gone to Nattat this stream runs through narrow gorges between lofty hills, occasionally opening out into little circular patches of paddy-fields.

PON-LINE—

A village in the Kachin hills, 2,300 feet above the sea. It lies in a deep thickly wooded hollow, the houses being all at short distances from each other. A rounded bold summit of the main range rises immediately over the village to an elevation of about 2,000 feet. The hills are clothed with a dense tree forest, with a large intermixture of bamboos, and some very fine oaks and palms. Some superior plantains are cultivated in the village, and the sides of the spurs below it are extensively cleared for rice cultivation.—(*Anderson*)

Gold is found on a hill to the north of Pon-line, and Dr Anderson was shown, when at Bhamo, a small quantity of this metal in grams as large as small peas which was said to have come down from these hills.

PONSEE—

A village in the Kachin hills, is about 3,000 feet above the sea-level, and is distant about fourteen miles from Pon-line. The district or sawbwaship formerly extended across the river and into the opposite valley. There are not more than twenty houses in it altogether, and it resembles Pon-line or any other Kachin village in the way the houses are scattered. There is a considerable portion of the sides of the hills brought into cultivation, and a small stream passes close to it. The hill above is said to contain silver. The population of Ponsee town or village is not more than two hundred, if it is so much.

POON-GA—

A hill near the Irrawaddy, lat 25° 45', long 97° 25', the head-quarters of a Kachin sawbwa.

POONS—

They say that the people who inhabit both banks through the whole course of the defile north of Bhamo are Poons. From Tha-pan-bin to the village of Pagan there are nine villages containing some 150 houses. The inhabitants live by cultivating "toungyas" and cutting bamboos. They do not cultivate rice. Their language is unlike Shan, Kachin or the Chinese. The men dress as Burmans, and the women as Shans. Their houses are like cowsheds, and they are very filthy in their dress. The Burmans take from them what revenue they think proper. Various Kachin sawbwas rule over them. When a Kachin sawbwa wants to make offerings of cattle, pigs, or poultry to the Nats, he takes from these people what he requires. These Poons are Buddhists. They study Burmese and Shan literature.—(*Native information, 1881*)

POUK-LEE-SHOUNG—

A sawbwa of the Kan-loung Kachins.

POUK-PEN-KAN—

A village in the Kyan-hny district. In 1837 there were 30 houses — (*Bayfield*)

POUK-SAN-POON—

A hill near the Upper Irrawaddy, lat. 25° 40', long 97° 15'

POUNG-DEE-DORA—

A village on the road from Myin-gyan to Nyin-gyan and 42½ miles from the former place, it is on the west of the road.

POUNG-LOUNG, OR SITTANG—

A river about 25 or 30 feet wide near its source, and running from the north-north-west.

PO-WA—

A village in the Singoo and Chouk-myong district In 1887 there were 30 houses.—(*Bayfield*)

PUTAR—

Cultivated fields, so called in the country between the Patkoi mountains and Mogoung

PUTTAN—

A village on the Myin gyan—Yemay-then road, 44 miles distant from the former place

PWAY-BOY-ZOO—

A village of considerable size, 84 miles from Myin-gyan on the road to Yemay-then

Just outside the town on the north west side is a tank of good water A large market is held here every five days, on which occasions it often happens that as many as four hundred carts collect. There are many pagodas in and around this place

There is a good camping ground close to some kyoungs on the south-east side of the town, of great extent It is on the bank of a stream in which there was a little running water in February, but which probably runs dry in the hot weather The stream is about 50 yards wide

The country for about 5 miles all round is pasture and paddy land, and there are great numbers of cattle The hills are about 15 miles off to the south-west and about 150 to 200 feet above the level of the plain The approach to the stream from the town is down a steep bank

The people here were so annoying from their curiosity that Mr Boxall had to leave without eating his breakfast —(*Boxall, 1882*)

PWAY-DA-YOO—

A small village on the Myin-gyan—Yemay-then road, 72½ miles from the former town The road leading to it is bad There is the usual amount of paddy cultivation, and besides onions, tomatoes, and brinjals Beyond, the cultivation is scrub jungle

PWAY-HLA

Is a large village, with fair houses

PWO—

A tribe of Karen

PWONS—

A people in Upper Burma. They pretend, that after the first fall of old Pagan, the Chinese conquerors pressed them into their service to conduct the elephants captured in the city back to China, that they escaped thence and wandered westward to the third defile of the Irrawaddy —(*Élias*)

PYAW-BWAY-GYEE-YWA—

A small village in the Myin-gyan district on the left bank of the Irrawaddy river

PYAW-BWAY-YWA-THIT—

A village on the Irrawaddy in the Myin-gyan district, one mile north-east of Thaboung. It consists of two clusters of huts about 60 in number. Population about 300—all Burmans.

The houses are of timber, bamboos, and mats. Village surrounded by thorn hedge.

There are about 200 bullocks and 100 carts, a few ducks and fowls, about

Supplies. 160 pigs, about 100 boats of 50 baskets

Rice, beef, mutton, pork, gourds, and pumpkins

South of the village is some high ground, on the east jungle, and north a maidan with kyoungs on it.

The streets are narrow and crooked. Each house has an enclosure round it, and the village is surrounded with a thorn and bamboo stockade.

The houses are made of timber and bamboo, the huts of palm leaves.

It is on the east bank.

Q

QUEICHO—

Is a province in the neighbourhood of Yunnan, and the great artery of trade, the Yang-tse-kiang runs up from Yunnan between it and Szechuan. Its products and its market are also well within the reach of British trade via Burma, if the proper route be adopted —(*Williams*)

R

RAPATONG—

A village on the east bank of the Irrawaddy about 10 or 12 miles north of Yandaboo. This was the spot at which the Burmans contemplated making their last effort had the British army not been arrested in its progress by the Treaty of Yandaboo —(*Crawford*)

This village is not shown on any map now.

S

SA-DAN—

A sub-class of the Kansa Kachins.

SA-DA-YA—

A town in Assam. Beyond, on the north side of the river, the tract is an uninterrupted jungle to the foot of the hills, and on its south side is the little village of Latao, the village on the Snhatu island, of the Tao-Gohain, and a Khaku village near the Dihing, form mere specks in the widely spread wilderness —(*R. Wilson*)

SAGAING—

The city of Sagaing, more than once the capital of the kingdom, is situated on the right bank of the Irrawaddy opposite to Ava. It is of large extent, and is enclosed by a massive decaying brick rampart. The interior space is now (1855) only very sparsely occupied by houses buried in dark groves of tamarind trees. A large tank or inundated hollow exists within the walls.

Outside the town the wooded lanes have in places a very English look.

There are several pagodas which were ruined by the great earthquakes of 1839, but otherwise are of little interest — (*Yale*)

The population of Sagaing is given on native authority as 50,000 souls. Most of the people are weavers of silk

"The Sagaing range of hills stretches for miles north and south, the southerly termination of the ridge meeting the river at the town. Exactly opposite to it is the rocky promontory of Shway-jay-yet, and between these two points the channel of the Irrawaddy is narrowed to 800 yards, while both above and below these points the channel widens greatly and is studded with sandbanks and islands

"The average elevation of Sagaing is not more than 500, with some points rising to 750. It is much broken up by small ravines and watercourses, the surface is very bare, covered only with a few stunted coppice shrubs, and a very scanty herbage

"The rocks are gneissose and hornblendic, with a thick run of limestone beds associated with them. The lower beds are micaceous-gneiss, thinly foliated and intercalated with other beds which are hornblendic

"They are also traversed by many veins of pure quartz, above these comes a series of beds of limestone, highly crystalline and in parts beautifully white, and saccharine marble

"Above the limestone come gneissose rocks again, more massive than those below, and of a pseudo-granitic character, abounding in felspar

"From the marble beds along this ridge much fine marble could be had. It is, however, not quarried for such purposes, but is largely used for lime, the kilns being situated at the southern end of the range, and the supplies of stone obtained from the rugged scarp of the hill just above the lime produced is of very good quality and colour. The promontory of Shway-jay-yet, opposite to Sagaing on the left bank of the river is also composed of similar rocks

"Running parallel with the main ridge of the Sagaing hills is a minor range which extends in a continuous line for 5 or 6 miles nearly due north and south from the town. It rises gradually towards the north to about 250 feet in elevation, and then terminates somewhat abruptly. Towards the south this ridge seems to be composed entirely of sands and gravels heaped up or tailed on to the northern end of the same range, where the solid rocks form the greater portion of the mass. Up the glen which separates the two ridges the road to Mout-zobo proceeds. Near the northern extremity of this minor range a marked spur is thrown out from the main range, and nearly crosses the valley between. This is composed entirely of limestone, for the most part tolerably white

"Passing northwards from this the country between the two ridges gradually rises into a broken undulating surface, the western ridge dying away suddenly. The main ridge continues to be composed of gneissose and quartzose beds in thin layers very much twisted, underlying the limestone of which the Toung-bela spur is composed

"About 2 miles north of this spur is the village of Kyoukta, close beyond which is a small lake, the water of which is brackish. A narrow neck separates it from another of about the same size, which lies to the north of it, and of the northern end of which is the larger village of Yega (bitter water). The country about here has a remarkably sterile, bare aspect

Along the western side the rocks are hornblende slates, limestone abounds in the main ridge to the east. Above the narrow channel between the rocky points of Sagaing and Shway-jay-yet, the Irrawaddy again expands to a considerable extent, and its bed is divided by many and large flat low islands and churs. These extend from this for many miles northwards (as far as Singoo-myo), the western bank of the river being well defined, steep and rocky, while on the east is a wide extent of flat alluvial ground, broken up here and there by small island-like ranges and hills. A few miles above Sagaing point low bluffs composed of pebbly conglomerates and sandstones and sands skirt the river bank, and continue from this, with little intermission, northwards as far as the village of That. These form a tolerably regular terrace-like flat intersected by many watercourses in front of the high ridge of metamorphic rock. They rise about 50 feet above the summer level of the river. Behind this flat rises the continuous ridge of the Sagaing hills, its highest point, nearly due west of Mengoon, called Shway-min-dhe, is 990 feet above the river level. The top of the ridge is narrow, and the surface drops rapidly on either side where the faces of the hills are scored deeply by ravines and watercourses which have narrow, saddle-backed spurs between them. —(*Oldham, 1855*)

The district of Sagaing extends 12 miles along the river and is of equal depth, and is said to contain 146 villages —(*Crawford, 187*)

SAGAING FORT—

Captain Barber says the Sagaing fort might be completely turned by landing a small force on the right bank of the river at the village of Ywa-thut, which is some 20 miles from Sagaing and from which a fair road enters Sagaing on the side away from the river. According to Mr Phayre, who has been over this part, the country at a short distance from the river is well adapted for the movement of troops. The fort of Sagaing being taken in rear could easily be captured, and the fire of the other forts could be subdued from the Sagaing heights.

Mr Phayre does not know whether this and the other forts are defended in rear or not, but the Sagaing fort could be attacked in rear as above described. The ground at the back of Sagaing fort is, however, bad. The river here makes a large bend westward, the ground embraced by the curve is one sheet of water in the rains, and in the dry weather it is difficult to traverse by reason of the numerous wheels and nales. A rear attack in the rains would have to be made in boats, though much of the water is shallow —(*1878*)

I was informed by a French engineer at Mandalay that the Sagaing redoubt was the same in size and construction as the Ava one, the only difference being that it has no ditch. The jungle comes close to the rear of it, and a force could come quite close to it without being noticed. From what I could see of it from the river it appeared to answer this description, and seemed quite unlike the drawing made by the Native explorers —(*MacNeill, 1882*)

SA-GOO-NOUNG—

A chief of the Kan-loung Kachins. He lives on Kan-san-poon —(*Native information, 1879*)

SAKEE-POON—

A hill in lat 26° 14', long 97° 35' Sa-boola, a sawbwa of Kan-loung Kachins, lives here

SAKHAN—

A halting place

SAKKA—

A village on the road from Myin-gyan to Nyn-gyan

SALAUNG—

A village on the route from Banong (in Karennee to Mandalay *via* Mokmay and Monay) containing 20 miserable huts —(*Richardson*)

SALEN-MYO—

Is situated on the west bank of Irrawaddy in lat 20° 34', long 94° 45'. It contains 10 000 inhabitants, and is the chief town of the fertile district of Salen, which covers between 500 and 800 square miles, and contains 64 villages, with a population of some 200,000 souls

Here the main road from Aeng is rejoined. Round Salen-myo are the remains of a teak stockade. The situation of the work is very strong, two sides being covered by large jheels, whence a wet ditch could be led round the remainder

A path for ponies and bullocks leads from this over the mountains to Talak

Water-supply precarious. The hills are very steep, and the Burmans in 1926 scurped part of the road to render it impassable

SAMAIK-GON—

A village situated on the bank of the Irrawaddy above Myin gyan —(*Fule*)

SAMAIK-GON, or SIN-MYEL-KONE—

A considerable village on the left bank of the Irrawaddy about 22 miles north of Landaboo. The bank of the river is here only just above flood level. During the floods an expanse of water separates it from the higher land behind, and a creek runs through. One of those very long bridges so characteristic of Burma crosses the inundation in rear

A considerable amount of saltpetre is made here. Major Allan gives the annual product at 20,000 viss, but this appears to be far too low an estimate. There is no ostensible restriction on the sale here. A great quantity goes to the capital, and the remainder is sold for the manufacture of fireworks

SAMAIK-GON to KYOUK TA-LOUNG—

At Samaik gon saltpetre is largely manufactured. Above this the channel of the river, still studded with islands, gradually becomes more defined. There is now a long reach of finely timbered country, with gently undulating and cultivated hills behind as far as Kyouk ta loung, where the hills come down to the river bank

They acquire the comparative importance they possess only from their contrast with the great extent of level ground about, for nowhere do they rise more than 100 feet above the river level. They form a series of small flat topped hillocks, with steep ravines between, composed of yellowish grey shaly clays with yellow earthy sandstones, all dipping to west by north at 15°. A few of the layers are hard and calcareous, but the majority are loosely coherent, and soft and earthy. The country behind formed on these rocks is a broken flat, the tops of the higher grounds being nearly level along the strike of the harder beds, and then intersected by deep glens running with the strike of the softer beds, which have been removed

The whole country seen from the higher grounds looks arid, parched and barren. The sandy dry and yellow soil peeps out all over, and is scarcely hidden by the stunted and half-grown brushwood and coppice, which is sparsely scattered over it. Not a tree is seen for miles together, and not a shrub taller than a man. "In the dry weather," says Mr Oldham who gives the above account of the country as seen during the rains, "the whole

of this raised district must be barren looking to a degree that can scarcely be realised from its present state. The open porous soil cannot possibly retain any moisture, and every blade of grass and every leaf must be withered and scorched."

SAM-LUNG-PHA—

Sam-lung-pha was made sawbwa of Mung-koung (Mogoung), where he established a city on the banks of the Nam-koung or Mogoung river, and laid the foundation of a new line of sawbwes tributary only to the kings of Man.

He was essentially a soldier, and undertook a series of campaigns as commander-in-chief of his brother's army.

Mithila campaign.

The first of these was an expedition into Mithila, where he conquered Maing ti (Nantin), Momien, and Wan-chang (Yung-chang), and from thence extended his operations towards the south Kaing ma, Maing-mung, Kiang hung, Kiang-tung, and other smaller states, each in turn falling under the Mau yoke. With Thien-nee an amicable arrangement was come to, the sawbwa becoming so far a vassal as to engage to send a princess periodically to the harem of the Mau king.

On his return to Mung man, Sam-lung-pha was ordered on a second expedition to the west, and on this occasion crossed the Chin-dwin river, and overran a great portion of Arakan, laying the capital in ruins, and establishing his brother's supremacy in a number of towns on and beyond the right bank of the Chin-dwin.

Arakan campaign.

The third expedition into Manipur was equally successful. The fourth campaign was into Upper Assam, where he conquered the greater portion of the territory then under the sway of the Chutya or Sutyas kings.

On his return his brother, who was jealous of him, poisoned him.

The following list is given by the Shan historians of the places under the sovereignty of the Mau kings immediately after Sam-lung-pha's conquests. Although it is greatly exaggerated, it is possible that at one time or another some portion of all the places named may have fallen under their power—

States subject to Mau Kings

1. Momiet—comprising seven Maings viz—
Bhamo-molai, Maing lung Ung boung Theebo Thung say Singoo, Ta-goung
2. Mogoung—comprising ninety nine maings, among which the following were the most important Mung lung (Assam), Kassay (Manipur), part of Arakan the Yaw country—Kaley Thoug thwot (Sumyok), Maing kaing, Maing yung, Maing-kwon, Sangring Khawti, Maing lay (Khamti proper), Mo-nyeng, Mout-sobo, Kunung Kumun, Mishimi country), Khang-say (Naga country) &c
- 3.—Thien nee.
- 4.—Monay
- 5.—Kang ma
- 6.—Kyan sin (Kiang-sin on the Mekong)
- 7.—Lan-san (Linsan)
- 8.—Pagan.
- 9.—Yun (Zimmay)
- 10.—King luh, (Kiang hung Kiang yung gye or Chay lee)
- 11.—King lung (district north of Ayudia).
- 12.—Mung lun.
- 13.—Tai lai.
- 14.—Wang-chang
- 15.—The Faloung country
- 16.—Sang pho (Seng pho country)
- 17.—The Karen country
- 18.—Lawak.
- 19.—Lepyit.
- 20.—Lama.
- 21.—Lakhang (Arakan)
- 22.—Langsap.
- 23.—Ayudia (Siam)
- 24.—Tawi (Tavoy)
- 25.—Yunmaling

If the above be correct, the Burmans must have felt pretty crowded at this time

In 1285 one Chau-wak-pha became king and founded a new capital called simply by the name of the country Mung-mau, and it appears on the site of the present town of Mung-mau. This is the last change of capital recorded. Chau-wak-pha died in 1315, and for 18 years no legitimate king reigned. In 1339 a relation of Chau-wak-pha named Chau-ki-pha, otherwise known as Tai-poung, was crowned, and with him an era of wars with China appears to have commenced, which ended in the fall of the Mau kings as independent sovereigns.

Chinese wars.

In 1343 A.D. a Chinese army arrived in the Mau territory from Mithila to reconnoitre, but returned without fighting.

In 1393 during the reign of Chau-ki-pha's son, Tailung, a Chinese force attempted the conquest of the country. It was defeated by the Shans, and returned after suffering great losses.

Tailung was succeeded after a reign of 50 years by his son, Chan-tit-pha, or Tan sway.

In 1414 A.D. he died and was succeeded by his son Chau-ngan-pha. He had two brothers named Chau-si-pha and Chau-hung-pha, with whose assistance he invaded and subdued the Shan states to the east and south-east of his country, and then marched on to Tay-lay, which state he also conquered. Here he was reinforced by the armies of all the chiefs he had subdued, and decided to attempt the conquest of Mithila. He started from Tay-lay, but was met under the walls of the capital (Mung-kyay) by the Chinese army and defeated. He then retired first on Tay-lay (probably Tai-foo), and afterwards on Wan-chang (Yung-chang), and eventually retired into Mau territory, followed by the inhabitants of all the places he had conquered, who preferred to cast in their lot with him, rather than endure the vengeance of the Chinese.

Arriving at his capital he found the inhabitants panic-stricken and flying to Ayudhia. His army broke up and joined in the flight.

He and his brother took refuge at Ava. The Chinese army followed, and taking up a position north of the city, demanded the surrender of Chau-ngan-pha from the Burmese king. The latter after certain negotiations was preparing to do so, when Chau-ngan-pha took poison and died.

His body was given up to the Chinese commander, who had it disembowelled and dried, and immediately after returned with it to Yun-nan in 1445 A.D.

Chau-si-pha was then placed on the throne of Mogoung, and Chau-ngan-pha's queen went to Kampti, where one of her children became sawbwa of Kampti.

In 1448 a relation of the late king called Chau-lam-kon kam-pha was placed on the throne of Mung-mau. In the fourth year of his reign a large Chinese force invaded his country, defeated his troops and compelled him to seek refuge in Ava. After five years' exile he returned to his country, and died in 1461 A.D.

He was succeeded in the same year by his son, Chau-hum-pha, who was assailed immediately after his accession by a Chinese army of great strength, which, however, he defeated and drove back after 18 days' hard fighting.

In 1479 A.D. the Chinese returned and routed the Shans, the king flying to Ava for protection. He was succeeded by his son Chau-kun-pha in 1489. In 1495 the Chinese again invaded in great force, and the result of the fighting was adverse to the Shans. The king abdicated, and retiring to Mogoung, became sawbwa of that state.

His son Chau-pim-pha succeeded him, and reigned in peace for 20 years, when a force of Chinese under general Le-sang-fa invaded the country, but was repulsed. This general only retired to a short distance, and shortly after captured the city by stratagem.

The causes of these wars are not mentioned, and it cannot be believed that the Chinese were always the aggressors, unless some provocation had been previously given by the Shans. Still the next and last two Chinese wars are described by the Shan historians to be, like all the previous ones, purely unprovoked movements on the part of the enemy.

Now follows the only war on record between the Shans and Burmans.

Chau-pim-pha was followed by his son Chau-hum-pha in 1516, who reigned for 88 years, and administered his country so successfully, that it attained a greater state of prosperity than it had ever enjoyed before. Whether it was that this state of prosperity excited the cupidity of the

War with Burma.

Pegu king, or whether he attacked Mung-man in the course of a general plan of conquest of the Shan states, it is impossible to say, but probably some other cause than that assigned by Burmese historians is to be looked for. These assert that, shortly before 1560, the Maus had seized some villages within the borders of Momiet, and that the sawbwa of the latter place had appealed to the Burmans for aid. But as Momiet had up to within a year or two of this time been a part of the dominion of the Mau kings, and the Burmans had been steadily advancing, it is not necessary to look for any special cause for quarrel.

During the year 1562 A.D. the king of Pegu is reported to have sent an army of 200,000 men under the command of the heir apparent and his three younger brothers, rulers respectively of Prome, Toungoo, and Ava. After little or no fighting they compelled Chan hum-pha to acknowledge himself a vassal of the Pegu king, and to send him a princess in token of homage. When the Burmese army retired the city was spared, and teachers of Buddhism were left to instruct the Shan priests in the worship of Gaudama.

In 1582 A.D. the Maus were attacked by a large Chinese army. Three great battles were fought, and eventually the Chinese sued for peace, which, being accorded, their army retired to Yun-nan.

In 1604 A.D. the Chinese General Wang-sang-soo with a considerable force invaded Mung-man. The Shans made a feeble resistance, and the Chinese took possession of the city and permanently occupied Mung-man.

The only remaining descendant of Chau-ham-pha was given the district of Mogoung to reign over by the king of Burma.

Mr. Elias, from whose history of the Shans the above extracts have been taken, opines that the Manipuri history of Pong, as quoted by Pemberton, is simply that of the Mau Shans, antedated by nearly five hundred years. The error doubtless arose in the first instance from the absence of an intelligible chronology in the Shan record, and for want of fixed points

in the contemporary annals of the neighbouring countries by which to set up landmarks

SAMENSAT—

A river falling into the Chin-dwin

SAMNEY, or THAMNEY, FUR—

This fur, so highly prized, is from an animal about the size of a small dog that lives in the mountains, and is very difficult to catch. The fur is close and long, and every fragment of the skin is made use of. When the route from Bhamo to Momiien was open, skins were brought down the country every year, but now scarcely a single specimen can be obtained —(*Anderson, 1868*)

SANBARA—

A town on the Chin-dwin river

SANDA—

Is a pretty little town built of brick, it is about a mile in circumference, and is situated at the base of one of the spurs projecting from the range of mountains that form the northern side of the valley, and is walled round. The town was in a great measure destroyed when the Panthays entered the valley, the Kachins followed afterwards, and completely gutted the place. It has been nearly rebuilt since, and is now a thriving little place. There is a suburb on the north east side of considerable extent, and it is here where all the business is transacted. The sawbwa's house is built in the Chinese style, with curved roof and turned up corners, all carved and ornamented. There are three courts to pass through to it, and it is sadly out of repair. The population of Sanda, Chinese and Shans, is from 3,000 to 4,000.

SAN KA—

A Kachin village on the Irrawaddy. The inhabitants cultivate kaings and toungyas, and grow poppies and make opium.

Above this is a large plain on which Kantees have established themselves in towns and villages.

SANLAWADY—

Pali name for Chin-dwin river

SAN OUNG—

A sawbwa of the Kan-loung Kachins. He lives on Mawloo-poon —(*1881*)

SAN-TA-FOO—

See *Sunda*

SARAY-DAU-GYEE—

These are assistants to the woon-douks, the term literally means "great royal scribes." They are from 8 to 10 in number, they are in fact the secretaries to the Hlwot-daw, and their business is to record its proceedings.

SAVA-MATTEE—

A sawbwa of the Kan-loung Kachins. He lives on the See-hnin (snowy) mountains —(*1881*)

SAWADY—

Is a miserable village of about 40 houses. It is under the protection of the Phonkan sawbwa, who also for a yearly payment of salt protects the village of Ywa-thit, situated about three-quarters of a mile to the north on the high bank of a small creek called Theng-leng, which floats into the Irrawaddy between high alluvial banks. The village of Sawady is defended by a double bamboo palisade, and a similar palisade runs along the narrow path dividing the two rows of houses. Sawady and Ywa-thit are both small emporiums for trade, whither the Kachins resort to procure fish and salt,

and they bring bamboo to be floated down the river, they are also ports for the trade to the interior. Around, stretches a vast plain, bounded by the distant hills, profusely covered with forest and jungle, sometimes of under-wood, sometimes of thick grass, 15 feet high, with frequent swamps, which in the wet season are covered with water — (*Anderson*)

SABWA—

A Shan prince or governor

SAY-LAY—

A small stream

SAY-PA-DAINE—

A village situated on the west bank of the Irrawaddy — (*Fule*)

SECHUEN—

"A province of Yunnan. It has a population of some 30,000,000, and contains some dozen cities of the first order. It produces silk of better quality and more abundantly, I was informed by the Chinese of Bhamo, than any other province. Its teas are also superior and abundant. It furnishes rhubarb, musk, and several other drugs, and many of the minerals found in Yunnan." — (*Williams*)

SEE-HNIN POON—

"Snowy mountain," situated about lat 26° 30', long 97° 35'. The Kan-loung Kachin sawbwa, Sara-matee, lives here.

SEE-REE-LOHIT—

Name applied to Irrawaddy by the Mishmis and hill tribes near its source.

SEHAN—

Is a small town of three hundred houses, surrounded by numerous large villages in the Kachin hills.

SERPENTINE—

This mineral, otherwise called oplite, when pure is a hydrous magnesium silicate, containing more water but less silica than talc. The proportions of these constituents respectively are silica 43.48, magnesia 43.48, water 13.04 = 100. Iron peroxide is generally present in varying proportions, and there are traces of other coloring matters which give to this mineral such varied and often such beautiful hues. There are numerous varieties of serpentine, the so-called noble or precious serpentine is partially translucent, the fibrous, foliated, porcellanic, and resin like varieties are distinguished by various names. The fibrous varieties, which are called chrysolite, &c., resemble asbestos, but as they contain a considerable quantity of water, they are not applicable to the same purposes.

Though, on account of its comparative softness, serpentine may easily be distinguished from jade, it is often mistaken for it.

Burma serpentine is exceedingly abundant in parts of British Burma, being found associated with the rocks of both the Axial and Negrais groups, and it accompanies the latter in their extension southwards into the Andaman and Nicobar Islands.

Some mines of serpentine are situated on the north of the lake Eng-daw-gyee, eight or nine miles distant, the tract of country in which the serpentine is found extending 18 or 20 miles.

In the district of Mogong in Upper Burma a green, translucent and very hard stone (called by Crawford and Pemberton "noble serpentine") is dug by the Shans and Kachins, and largely purchased by the Chinese for exportation to their own country, where it fetches an extravagant price (probably on account of some supposed talismanic or detective virtues), and is manufactured into cups, bracelets, &c. The value of this trade is represented

by respectable Chinese at Amara-poor to reach from six to ten lakhs of ticals per annum

At particular seasons of the year there are about 1,000 men employed in digging for serpentine, they are Burmans, Shans, Chinese Shans, and Sing-phoes. These people each pay a quarter of a tical a month for being allowed to dig at the mines, and the produce of their labour is considered their own.

The hills formed of serpentine may be distinguished at a distance by their barrenness, they appear to support little except grass and a few bushes. The greenstone hills, on the other hand, are covered with luxuriant forest. In all probability the serpentine and greenstone outbursts were originally the same, or nearly the same, and the former rock has undergone a chemical change

SHA-DAW—

A village about half a mile north of Ywa-zee. Population about 400

A little above this village is a large stream which is deep towards the mouth and breast-high where crossed if proceeding to Myin-gyan.—(*Native information, 1881*)

SHA-GWAY—

A village in the district of Singoo and Kyonk-myong. There were 40 houses in 1837.—(*Bayfield*)

SHAG-WAN—

A fort, the Burmans call it Hia-kwang or Hsa-kwan

SHANS—

The people called Shans are a section of the great Tai race, which spreads by one name or another from the valley of Assam in the west over nearly the whole of further India, and far into the interior of China

These people who, inhabit generally the northern and eastern hill tracts of Ava and the western districts of Yunnan, and who have at the present day no distinguishing national name as a whole, such as the Laos, the Abors or Siamese, were formerly members of one extensive country composed of several states or provinces, dependent on a central kingdom, the ruler of which held paramount power over all

A native name for this collection of states seems to be wanting, but the paramount kingdom, being the house of the branch of the Shans called Man, was named by them Mung mau, or "the country of the Mau"

In Burma the classical name of Kusambi, one of the most celebrated cities of ancient India, was applied to it. This word is also held to be a Burmese combination, "Ko-Shau-pyee" signifying "nine Shan states". At some periods Mung-mau was composed of nine provinces or maings, though usually of ten

These were—

1. Mung mau.	4. Mung la.	7. Si Kuen.†
2. Mung ta	5. Sanda.	8. Momen.
3. Mung wun.	6. Mung-sa.*	9. Sei fan.

The *Peking Gazette* of 30th August 1873 gives eleven Shan states, all subject to Yung chang-foo—

1. Meng tang (a prefecture)	6. Chen fang (sawbwaship)
2. Wan tien (a department)	7. Sanda (sawbwaship)
3. Chen kang (a department).	8. Lukiang (sawbwaship)
4. Tuen yay (sawbwaship)	9. Mang she (sawbwaship)
5. Lungchwan (lamwaship.)	10. Nan-tien (sawbwaship)
11. Mung mau (sawbwaship)	

* Afterwards divided into Ho-Sa and La-Sa.

† Not to be identified.

The Manipuris knew Mung-man as the kingdom of Pong or Bong, and possibly in some instances may have used the name of Pong in the more extended sense for the entire country or collection of states.

The position and boundaries of the ten mangs of Kusambi may be assumed to embrace the modern Chinese Shan states of the same names, and also to have extended further towards the east than these, perhaps as far as the Salween.

The northern boundary is nowhere distinctly mentioned, but was probably adjacent to the Mishmi country. The eastern is said to have been the Cambodian river, while the west and south, according to Mung-man and Mogoung annals, were believed to be bounded by the nine arms of the sea, beginning in the west on the borders of Bengal, and extending to the east beyond the territory of the Ayudia Shans in Siam. This boundary cannot be accepted, as it would include the whole of Burma and Siam in the Mau dominions, which was never the case even in its most flourishing days.

Its approximate extent may be estimated by the chief mangs or dependences embraced by it at ordinary times of its independence.

These were—

- | | |
|---------------|--|
| 1. Mogoung | 7. Mang mang |
| 2. Mongyang | 8. Mang-sung |
| 3. Khaneti. | 9. Mang-aeu |
| 4. Monay | 10. Kiang hung (Kyoung gyee or Chelee) |
| 5. Thien nee. | 11. Kiang tung |
| 6. Kaingma. | 12. Mung mui (Momi) |

Mr Klaproth supposes the Shans to be of Tartar origin, but if they be, the period of their migration into the Shan provinces must be very remote, since all traces of their original language have been lost. Captain Hannay, from whom the above is taken, says "The Shans of Yunnan and of Burma point to that part of Thibet lying to the north and east beyond the sources of the Irrawaddy as the original country, which they call Moung fan or Phang, and is the Phong, Bong, or Pong mentioned in the chronicles quoted by Dr Taylor as belonging to the Manipuris or Kathay branch of the Shan race, and hitherto considered as situated in the province of Mogoung." He adds, however, that neither the Ahom or Shan chronicles show that any branch of the Shan race came into Assam previous to the beginning of the thirteenth century.

NAMES BY WHICH THE SHANS AND SIAMESE ARE KNOWN TO SOME OF THE NEIGHBOURING NATIONS

Shans

By the Burmans
 By the Chinese
 By the Manipuris
 By the Assamese
 By the Kachins
 By themselves

Shan or Shyan.
 Pa-I valley barbarians.
 Kapo (Kubbo) Pong
 Sam.
 Sam.
 Tai, or, Kun.

Siamese.

By the Burmans
 By the Chinese
 By the Assamese
 By themselves

Yadia Shyan.
 Sien lo.
 Yutara.
 Tai or Htai.

The Shans have no era, but, like the Chinese and other allied races, count their time by means of cycles of 60 years.

Chronology

The Chinese, who date their cycles to commence so far back as 2687 B C, are probably the originators of the system, and the rest their disciples.

In the Chinese scheme there are ten so-called "stems" and twelve "branches," the former being combined in couplets in order to form five multipliers to the latter, which are named after twelve ordinary animals. In the Laotian, Annamite, and Siamese schemes the twelve branches are named after animals in the same way as the Chinese, though the animals are not all precisely the same.

Chinese.	Laotian and Annamite	Siamese.
1 Rat	Rat	Rat.
2 Cow	Ox	Ox
3 Tiger	Tiger	Tiger
4 Rabbit (hare)	Hare	Hare
5 Dragon	Dragon	Great dragon.
6 Snake	Snake	Little dragon
7 Horse	Horse	Horse
8 Sheep (goat)	Goat	Goat.
9 Monkey	Monkey	Monkey
10 Cock	Cock	Cock
11 Dog	Dog	Dog
12 Bear	Pig	Pig

Sir John Bowring speaks of the Siamese cycle as composed of a fivefold repetition of the twelve names arranged in decades, the first commencing with the *rat* and ending with the *cock*, the second beginning with the *dog* and ending with the *goat*, and so on regularly to the sixth decade

This is probably the way with the Laotians, and certainly with the Northern Shans

In the Shan books the cycle is altogether ignored, and neither name nor number is recorded, it is therefore impossible to fix a date from their annals direct, and without having recourse to ulterior facts as starting points

The length of each king's reign is carefully preserved, and forms the main basis on which to reckon the dates

The Man Shans appear from the Burmese books to have a legend assigning their origin to the earliest period of Burmese history, and indeed to a common parentage with the latter people. It is as follows

About 300 years before the birth of Gaudama, or 923 B.C., a Sakya prince called Abbi Raja arrived from Kapilavastu by way of Arakan, and founded the city of Pagan (called Thindue and Thantaya-myo) on the left bank of the Irrawaddy

He had two sons, whose Burmese names were Kang-gyee and Kang-ngay (elder and younger Kang), and at his death the former retired to Arakan and became king of that country, whilst Kang-ngay succeeded his father at Pagan, and in his turn was succeeded by 81 of his lineal descendants, whose names are given in the Burmese record, but no dates.

The last of these, or 53rd from Abbi Raja, was one Beniaka, who reigned, roughly speaking, about the commencement of the religious era, or partly during Gaudama's lifetime. In his reign a Chinese army invaded his country, captured Pagan, destroyed it, and obliged him to take refuge at Malay nearly opposite Sampenago.

Here he shortly after died, and his people were broken up into three divisions. One of these remained at Malay under Beniaka's queen, Naga Sng, a second wandered towards the south and was absorbed by the Pru, a section of the Burmans, while the third migrated eastwards and became Shans, forming the nineteen original Shan states.

After the Chinese had retired from Pagan, one Dhaja Raja, another prince of Kapilavastu, came from India, married the widow Naga Sing, and rebuilt the capital immediately beyond the north wall of the old city. This was the Tagongg of the Burmans, and the Tai-tung-kung of the Shans, and the date of its foundation given by the Burmans is 523 B.C., and by the Shans 519 B.C. After this there are no dates or numbers of generations recorded with any certainty, but Dhaja Raja's dynasty appears to have ruled at Tagoung until Kun-lung displaced it and put his son Ai-Kun-lung on the throne. This probably occurred about a generation after the year 568 A.D.

Man Shans—

The Man Shans claim descent from two sons of the gods Knn-lung and Kun-lai. Loung-goo, a mortal, became servant to both brothers. They in return for his services gave him the country of Mithila to govern. Mithila is the Pali name for Mung-chay or Yunnan.

Loung-goo, on arriving at Mithila, founded the capital of Mung-chay, and commenced his rule in 568 A.D. He died after 60 years' reign, and was succeeded by his son Chau poo, who also reigned 60 years. His descendants reigned for 200 years, when a relation of the same race, named Tway-no-ngan-maing, succeeded to the throne, and, together with his other descendants, retained it for 150 years, or till A.D. 1038. Here the Shan records have Loung-goo *alias* Chau ti-kan.

Kun-lung and Kun-lai having quarrelled, the former determined to abandon his claim to the kingdom in the Shway-lee valley, and to found a new one for himself. He accordingly moved westward, and crossing the Irrawaddy, he arrived at a place near the Ooroo tributary of the Chin dwin, where he founded a city called Mung-kaing, Mung-nyoung, and sometimes called Mung-koung, but must not be confounded with Mogoung (Mung-koung). From this place he sent forth his seven sons or relations to be rulers of the neighbouring states as follows—

- | | |
|-----------------|---|
| 1 Aing Kun lung | King of Tai tung kung or T'goung |
| 2 Kun pha | King of Mo-nyeng (Mung nyoung) |
| 3 Kun ngoo | King of Lamung tai &c., Laboon near Zimnay. Yearly tribute 300 elephants. |
| 4 Kun kwot-pha | King of Yun lung or Mung yung |
| 5 Kun-lai | King of Mung kala or Kala on a western tributary of the Chin-dwin. |
| 6 Kun tha | King of Ava. (Probably Momet is meant, especially as a ruby mine is said to have existed at his capital.) |
| 7 Kun-so | King of modern Mung nyoung on or near the Ooroo. |

Kun so reigned 25 years, from 608 to 633 A.D., Chau-sen-san (a son) reigned 19 years, from 633 to 652 A.D., Chaw-kun-jan (a son) reigned 15

years, from 652 to 667 A.D., Chun-kan-jan (a son) reigned 11 years, from 667 to 678 A.D. Thus Kun-lung and his posterity reigned at Mung-kaung Mung-nyoung for 110 years.

Meanwhile Kun-lay had founded a capital called Mung-Ri Mung-Ram at a short distance from the left bank of the Shway-lay. Here he reigned for 70 years, and was succeeded by his son who ruled for 40 years, but who died without issue in 678 A.D., the 40th year of the Burmese era. The son Chau-kun-jun was then created king, and in his person Kun-lung-shin became supreme among the Man.

He was followed by his son, during whose rule the capital Mung-Ri Mung-Ram declined, and became of secondary importance to the town of Ma-kan Mung-lung, which was situated on the right bank of the river, and believed to be six or seven miles west of the capital. This king was succeeded by his younger brother Kam-sip-pha in 703 A.D., and established his court at Ma-kan Mung-lung, thus finally abandoning Mung-Ri Mung-Ram.

During the next 332 years Kam-sip-pha and his descendants appear to have reigned in regular succession. In 1035 Kun-kwot-pha, a relation of the race of Taipong of Yun-lung, was placed on the throne, and established a new capital called Chula on the left bank of the Shway-lee immediately opposite Ma-kan Mung-lung.

At this period the dominant power in these regions was that of the king of New Pagan, Ananratha. Kun-kwot-pha's son is said to have given his daughter in marriage to the Pagan monarch. The kings of Man reigned in peace and unbroken succession until the death of Pam-yan-pung in A.D. 1210, when a third influx of Kun-lung's posterity occurred. This was Chan-ai-mo-kam-neng, who reigned for ten years, and had two sons. The first Chan-Kam-pha, the second Sam-lonng kun-mang, the most remarkable person in the Man history. The former succeeded his father in 1220 A.D.

SHAN-ENG—

A village in the district of Kaun-toun. There were 20 houses in 1837 — (*Bayfield*)

SHAN-LAY-BO—

A village in the district of Hen-tha-man. There were 30 houses in 1837 — (*Bayfield*)

SHAN-PENG—

A village in the district of Man-lway — (*Bayfield*)

SHAN-PHYOO—

A village in the district of Than — (*Bayfield*)

SHAN-SHIET—

A village in the district of Maiza-chyong

SHAUK-SAT—

A village under the chief of the district of Mo-lay — (*Bayfield*)

SHEEN—

A village in the district of Singoo and Kyouk-myoung. There were 60 houses in 1837 — (*Bayfield*)

SHE-NAY—

Pleaders. These are the most intelligent and active officers connected with the administration of justice. They are described as being tolerably well acquainted with the law and its forms, and are occasionally useful and industrious.

SHIEN-PAGAH—

A thriving town of some four hundred houses situated on the bank of the Irrawaddy

A brisk trade is here carried on in fish and firewood for the capital, and salt procured from the swamps behind the sterile Sagaing hills.

SHIM-BWAY-YUNG—

A village of the Tisan tribe of Singphos —(*Bayfield, 1837*)

SHING-MYEN—

A village of the Tisan tribe of Singphos.—(*Bayfield, 1837*)

SHITEE-DOUNG—

A mountain in the Kachin hills, about 200 feet high from the level of the camping ground at Ponsee —(*Anderson*)

SHUI-DOIK—

A village in the district of Singoo and Kyouk-myung There were 35 houses in 1837 —(*Bayfield*)

SHWAY-BAN—

A village in the district of Singoo and Kyouk-myung There were 60 houses in 1837 —(*Bayfield*)

SHWAY-BAN-KYUN—

A village in the district of Mo-nyang There were 20 houses in 1837 —(*Bayfield*)

SHWAY-ENG—

A village under the chief of the district of Nga.—(*Bayfield*)

SHWAY-GAO-HYAUTY KAN—

A village under the chief of the district of Nga

SHWAY-GOO-MYO—

A town situated on the east bank of the Irrawaddy There are about 200 houses

SHWAY-HO-KYUN—

An island on the Irrawaddy, the upper part of which is literally covered with pagodas —(*Bayfield*)

SHWAY-KAN—

A village under the chief of the district of Nga.—(*Bayfield*)

SHWAY-KONTAIN—

A village in the district of Singoo and Kyouk-myung There were 80 houses in 1837 —(*Bayfield*)

SHWAY-LEE—

A deep river, a hundred yards wide, at its junction with the Irrawaddy

SHWAY-LEE—

A village in the district of Mya-doung There were 21 houses in 1837 —(*Bayfield*)

SHWAY-LON—

A village in the Nan-yeen district —(*Bayfield*)

SHWAY-MA-LE—

A village in the district of Singoo and Kyouk-myung There were 100 houses in 1837 —(*Bayfield*)

SHWAY-MUE-LONG—

A high mountain facing Mawphoo "From the summit, a level path turning north-east led us to Mawphoo, situated at the extremity of a high level basin, marked by two terraces on the northern side, with the Taho flowing invisibly in a deep cleft or ravine at the base of the southern hills" —(*Anderson*)

SHWAY-MYIN-DIN—

A small hill, situated east of Yemay-then, is surmounted by a number of pagodas and masonry buildings. From the top there is a fine bird's-eye view of the immense expanse of low country sweeping round from the north to west and south, and bounded only by the distant horizon.—(*Fadden, 1864-65*)

SHWAY-MYO—

A village on the road from Yemay-then to Nyn-gyan.

SHWAY-NWAY—

A village in the district of Ha-khan —(*Bayfield*)

SHWAY-TA-CHOUNG—

A stream flowing to the south from the Madeya river, it breaks off above the town of Madeya, and discharges itself into that creek or channel of the great river which passes near the Arakan temple, and washes the north-eastern corner of Amarapura.—(*Yule*)

SHWAY-TON—

A village in the district of Singoo and Kyonk-myung. There were 40 houses in 1837 —(*Bayfield*)

SHWAY-TWON—

A village under the chief of the district of Main-moo —(*Bayfield*)

SHWAY-ZAR-YAN—

A large town, situated on the Myit-ngay. This town is a great entrepôt for the barter of the well-known laphet, or wet tea, so largely used throughout Burma. Knots of Shans, with great droves of cattle feeding around, formed picturesque groupings round the foot of the temple steps and among the noble trees adjoining, all waiting here to exchange tea for salt, &c, for their return journey. The road leads past here to Thoun-g-zay, and so on to Thee-baw and Then-nee —(*Yule*)

SHWAY-ZEE-GONE—

A temple south of Ava

SHWON-SAY—

A village under the chief of the district of Mo-mouk —(*Bayfield*)

SIDAN-LA—

A village of the Ia-pae tribe of Singphoos, situated on the east bank of the Irrawaddy —(*Bayfield, 1837*)

SIHET—

A village in the Kachin hills

SIKIOBEN—

A town near Mount-zobo

SI-KROON-KHAN—

A village of the In-ting tribe of Singphoos. There were 100 houses in 1837 —(*Bayfield*)

SI-LAN—

A village of the Moran tribe of Singphoos. There were 10 houses in 1837 —(*Bayfield*)

SILAP-TOO—

A village of the In-ting tribe of Singphoos. There were 20 houses in 1837 —(*Bayfield*)

SILAY-MYO—

A town of 3,000 inhabitants on the left bank of the Irrawaddy

Yule describes the appearance of the town in 1855 thus "The main part of the town has lately been enclosed in a bamboo fence, behind it are numerous religious buildings of different classes. Two or three miles below

the town was a large collection of ruined temples similar to those of Thabyay-lun, they bear the name of Shen-byeng-sa-gyo ('Where the kings' bones were met') from a tradition that the body of a king who died at a distance from the capital was met here by the courtiers from Pagan and received the funeral rites."—(*Yule*)

When the British army passed through this place in 1826 it was stockaded, but the defences were incomplete, owing to the want of material in this open country

To the east about 2 miles distant are the villages of Ma-gyee-kan and Ywa-thaya, at the latter place cattle are particularly plentiful. The climate here is very dry

It is the head-quarters of a woon, and is in the Silay district

There are about 150 carts and bullocks, for these there seems to be little cultivation about here. About 15 boats of 300 or 400 baskets. Houses of bamboo and timber. Supplies scanty

The chief feature of Silay-myo is the rock to the north of it. This is about a mile long, stretching nearly west and east, and varies in breadth from 200 to 400 or 600 yards. It is scored with ravines in places, but there is a good expanse of open flat ground available

In many parts it is precipitous, and the top of the hill has an average height above water in December of 60 or 70 feet, rather more. The southern end of this hill is about 400 yards long by 200 broad. A ravine cuts this in two, and to the east another ravine cuts the western from the eastern portion. This latter is all open ground, and extends eastwards for fully a thousand yards with an average breadth of 300 or 400 yards. I had not time to go over this portion, and consequently cannot say positively the extent of it. There are a few pagodas on the plateau, and no trees, the formation is sandstone. This would make an excellent defensive position, and it is surprising that the Burmans have not occupied it. When a British force advances up the river, this is one of the commanding positions which should be held as a station on our line of communications.—(*MacNeill, 1882*)

SIMAH—

A village of the La-pae tribe of Singphos situated on the east of the Irrawaddy.—(*Bayfield, 1837*)

SIM-PHONG—

A village of the Moran tribe of Singphos.—(*Bayfield*)

SIN-BYOO-GYON—

It is one of the most important commercial towns, and is said to contain a population of 20,000 inhabitants. About 10 miles inland is the town of Salin. Much trade is carried on via the Aeng pass and Salin, between Arakan and Sin-byoo-gyon, in jaggery, silk cloths, and catechu. Sin-byoo-gyon is on the bank of a small river, a couple of miles from its junction with the Irrawaddy on the right bank.

In the rains good-sized boats can approach it, but the river steamers halt at the village of Kyabin or Chom-yoo

There is a great deal of paddy cultivation about here, and during the floods the country is covered with water for a great distance. A flat alluvial plain extends from the river right up to the spurs of the Arakan range. Sen-byoo-gyon was burnt by the Burmese army in its retreat in 1825-26.—(*MacNeill, 1882*)

SIN-DEH-WA—

A village on the Choung-bouk stream, opposite to the village of that name.

SIN-DOUNG—

A prominent hill in a direction to the north of east from Yemay-then.

SING-JOU—

A village of the In-ting tribe of Singphoos There were 5 houses in 1837 —(*Bayfield*)

SIN-GOO—

A commercial town on the left bank of the Irrawaddy It is 5 miles north of Bone-ma-yasa-chouk It contains about 4,000 inhabitants —(*Natives information*)

"One of the tributary channels enters the Irrawaddy just below Sin-goo These channels are curious, being so very wide as apparently to require very sudden discharge to fill them, whilst there is no hilly source, the general cause of that condition, visible"—(*Yule*)

The country behind Sin-goo is formed in long gentle slopes or rolls, and a great deal of it is fenced, as if in habitual cultivation Periodical droughts, which sometimes last 5 or 6 years, occasionally throws this out of tillage, and makes it very barren

This is the head-quarters of a woon, and is in the Sin-goo district

The streets are straight and from 30 to 40 feet wide There is an open space with a kyoung in it, which would hold about 1,000 people.

The houses are small, of timber and bamboo

Cultivation.	Paddy, sesamum, cotton, maize, peas and beans, are grown
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Transport	About 150 carts and bullocks About 60 large boats of 500 or 600 baskets
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Supplies.	Rice, paddy, fowls, a few goats, fish (dried and fresh), ngapee, peas and beans, salt, chillies, and
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onions

Inhabitants.	There are a few Chinamen here, the remainder are all Burmans
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On the east side of the town the land is not very good, but on the south there is a piece of good land large enough to accommodate about 2,000 people

SIN-GOO MYO—

A town of about 500 houses It was once a fortified place and the capital of a petty kingdom, in times when Burma was divided into several principalities The old wall still exists on the east and south, but the west rampart has been carried away by the river, and other parts are so thoroughly destroyed as to be no longer traceable Outside the old wall, now overgrown with brushwood and trees, the country appeared to be a fine undulating park-like tract, studded with numerous tops of noble trees Near the south-west corner there is a perfect forest of mango, guava, cocoanut, and ornamental trees, which mark the site of the ancient royal garden Sin-goo-myo is prettily situated on a bend of the river, immediately north of a rocky point of greenstone on the east bank Below this the Irrawaddy is of very irregular width, often dividing into several arms enclosing large islands, some of them temporary, and bare sandbanks, others covered with vegetation, jungles of tall grasses, or even forest growths —(*Anderson, 1878*)

SIN-GOO SAKHAN, or LAY-BYIN—

A village on the route from Lay-deah to Hline-det.

SIN-LON—

A village of the Tisan tribe of Singphoos —(*Bayfield, 1837*)

SIPOM—

A village of the Mirip tribe, situated on the western bank of the Irrawaddy.—(*Bayfield, 1837*)

IN-POUNG-POON—

A hill in lat. $28^{\circ} 20'$, long $97^{\circ} 35'$ La-boo-shoung, a sawbwa of the Kan-loung Kachins, lives here

SIN-THAY—

A large stream, which flows into the Sittang or POUNG-loung at Sin-thay-wa-ywa.

SIRA—

A town near Mont-zobo

SIRANG—

A village of the Mirip tribe, situated on the western bank of the Irrawaddy.—(*Bayfield, 1836*)

SIT-GNA—

A Kachin village

SIT-KAW—

A village on Taping river, lat. $24^{\circ} 25'$, long $97^{\circ} 4'$

SITOONG-YANG—

A village of the Mirip tribe, situated on the western bank of the Irrawaddy.—(*Bayfield, 1837*)

SITTA—

King of Sampenago

SIT-THA-BO-GLAY YAY-NAN-GYOUNG—

Between this village and Yaynan-gyoung the cliffs are much intersected by small ravines and watercourses. It is only in the low holm-like little valleys that trees are seen, where the percolation of the moisture from the river banks affords sustenance to the roots. On the hill tops nothing larger than a shrub can be traced. Everything is stunted and parched. Euphorbias grow luxuriantly and indicate the hot and thirsty soil of the district, while a thinly scattered coating of grass barely relieves the arid grey of the whole surface.

SON-GA-LWOT—

A village under the chief of the district of Wain-man.—(*Bayfield*)

SOO-DAH—

A small village on the road from Myin-gyan to Yemay-then. The approach from the north-west is across paddy fields, and very bad. It would probably be impassable in the rains.—(*Bozall, 1832*)

SOO-KAT—

Soo-kat ferry is in lat $21^{\circ} 56' N$, being about 450 miles from the mouth of the river at Martaban. Its elevation is 1,050 feet above the sea-level. The average inclination therefore of the riverbed is about $2\frac{3}{4}$ feet per mile.

The shores of the river at Soo-kat are about 240 feet apart at the waters' edge, but must be double this distance during the floods that rise to some 95 feet above the present level in the month of August. The ordinary flood marks are 60 or 65 feet above the summer level.

The body of water in the river is here flowing swiftly, and turbulently boiling up, as it were, in places. It is very deep (eight or ten fathoms at the least), for some soundings I took at the shore were over seven fathoms. It was impossible to remain out in the stream without strong ropes and anchors.

There is no village, but a house or two on the left bank inhabited by the ferry men, indeed, we could not find a level spot of ground to pitch a small tent, for there are no banks properly so called, the hills rising directly from the shores of the river. The shores are irregular, and consist of hard rocks with dislocated fragments in heaps, and large sandbanks intervening between the more prominent rocky points. This sand, which is of the finest grain, is very micaceous and of a grey colour. Some of the rocks are a kind of obsidian, and have the appearance of compact slag as from a furnace, others are encrusted with the same. Some beds are shaly, slaty, and also chloritic, foliated, and contorted, others again are hard and silicious. The several faces of these—indeed, the whole of their exposed surfaces—are beautifully polished by the friction of the sands. Pebbles are very scarce, and only found wedged in the clefts and cavities of the rocks, or as a shingle bank near the mouths of the large mountain streams. Most of the hard rocks are coated with a peculiar black polish resembling in appearance only black lead, but is, I believe, an oxide of manganese only.

The ferry men take advantage of a strong backwater on the right side, where the river is widest, but just above this the channel is contracted by rocks projecting from the right shore, where a two hundred feet cord will reach across. Again, about a quarter of a mile below the ferry, the whole volume of water passes between rocks not a hundred feet apart. Here the depth could not be ascertained, the velocity of the current being so great, almost a rush, noisily chafing its rockbound channel. But these rocks are only about 20 feet above the present level of the river, and must be deeply submerged during the floods. They are slaty and somewhat schistose, and might readily be removed by blasting. The river winds considerably in these parts, and is so shut in by hills that not more than a mile or so is visible from any one point. The natives (ferry men included) would not venture down it by boat or raft at any price. They say that coolies can make their way down the left bank for many days' journey, and also up the river for about three days to where there is a ferry, and then the pathway is continued on the right bank northerly, but it does not keep to the river-side, but goes inland some distance. I was also informed that above, the stream runs much swifter and more disturbed, the water rippling in small froth waves—(*Salween Expedition—Report*)

SOUK-KAN—

A Kachin sawbwa. He lives at Moon-koung-poon

SOUK-LEE—

A Kachin sawbwa of the Kaching mountains

SOUK-MOON—

A Kachin sawbwa. He lives at Mara hills

STHONG-YA—

A village of the Lapae tribe of Singphoos, situated on the west of the Irrawaddy—(*Bagfield, 1837*)

SUAH-SHEEN—

A village in the district of Mo-nyeng. There were 40 houses in 1837.—(*Bagfield, 1837*)

SUM-LANG—

A village of the Mimp tribe, situated on the western bank of the Irrawaddy—(*Bagfield, 1837*)

SUSEENAH—

A river north of Bhamo It is about fifty yards broad, the current on the surface being scarcely perceptible, but the depth must be great, for within three feet of the water's edge the 21-foot pole could find no bottom.—(*Clement Williams*)

T**TADA-OO—**

A village on the road from Myin-gyan to Yemay-then There are several pagodas here The approach from the north-west is across paddy-fields, which extend several miles on either side.

A road leads from Tada-oo through an opening in the ramparts round Ava, called Hanthawaddy gate, to a pagoda in the north-east corner

TAGA-DAY—

A village consisting of two clusters of huts numbering about 40, and 2½ miles north of Kan-gyee-daung Population about 200

TAGOUNG-DEH (L)—

A village of 40 small huts, about 1½ miles north-east of Palin The population about 120 souls

TAHLONE—

A Kachin village

TAHMEYLON—

A village situated on the north of Taping river

TAHO—

A branch of the Taping river which flows from the east-north-east between the high hills which appear to bound the valley, but opening farther on, enclose the valley of Nantan

TAKONG—

A village on the route from Myin-gyan to Yemay-then, lat. 20° 10', long 96° 9'

TALAU—

The town of Talau stands on the right bank of the May-lem, a large stream of from 150 to 320 feet broad, and contains about two hundred houses In the vicinity are numerous villages with cultivation —(*Macleod*)

TA-LAW—

A village on the Irrawaddy The people wash for gold.

TALI-FOO—

A town in Yunnan, the population of which did not in 1868 exceed 35,000 The rich plain, walled in by mountains, and with a lake teeming with fish, stretching forty miles in length and ten in breadth, maintained a population estimated before the war at 400,000 Garnier states that there were 150 villages, but the old resident numbers them at 253. The mountains to the north and south close in upon the lake, and the plain and city are accessible only by two strongly fortified passes—Huang-kwang and Hia-kwang, or, as the Burmans call them, Shangwan and Shagwan Thus Tali has been from the earliest times a strong city It was the capital of a kingdom at the invasion of Kublai Khan, and is still regarded by the Tibetans, who make pilgrimages to its vicinity, as the ancient home of their forefathers.

TAMON—

A village on the Taping river with a large bazaar

TA-NOUNG-DAING-PYAW-BWEH—

A village situated on high ground about $1\frac{1}{2}$ miles from Zee-gyoon. Population about 2,000

Water-supply from wells —(*Native information, 1881*)

TA-NOUNG-GAIN—

A village $2\frac{1}{2}$ miles north-east of Gway-gone Population about 500

Jaggery is manufactured here.—(*Native information*)

TAN-TA-BEN—

A large village on the left bank of the Irrawaddy in lat $20^{\circ} 38'$, long $94^{\circ} 55'$ It is situated in one of the gaps so frequently met with in the high sandstone banks, and the only fertile places in this part. In the front ground is a large tope of palmyra trees, then a little paddy cultivation, and a good deal of bare ground behind. The spires of many pagodas tower above the trees, and from forty to fifty boats lie along the bank, which is of firm clay. What appears to be the dry bed of a stream bounds the village to the south, and palmyras extend along it. But little paddy or other crops appear to be raised here. To the north of the pagodas, and between them and the river, are the houses of the village. About 100 can be seen from the river, but this number must be far exceeded, for palmyra groves and pagodas extend far inland.

A couple of miles to the back of the town the country appears dry and brown, with here and there strips of foliage. Sandstone cliffs form the banks, in many cases rising abruptly from the water —(*MacNeill, 1881*)

TAPING—

The Taping river issues from the Kachin hills about 15 miles east-north-east of Bhamo, near the site of the ancient Shan town of Sampenago, or the "Old Bhamo." It is thenceforth a quiet river, of a breadth varying from a hundred yards to half a mile (now and then enclosing islands half a mile or more in length between its channels), and of depth sufficient, even in the driest seasons, to give passage the whole way to boats drawing two or three feet of water, and often showing no bottom at two fathoms. In the freshes it rises some 15 feet or more and overflows its banks. After a moderately winding course, the Taping reaches the great river at Suseenah, a couple of miles north of Bhamo.

TAR-GOON—

A village on the road from Yemay-then to Nyin-gyan. The country is well cultivated, and for Burma thickly populated. The road from the north is bad and muddy in places.

TA-SAING—

The village of Ta-saing consists of ten Kachin huts. The inhabitants cultivate *toungyas*. They grow poppies and make opium. The men wear waist-cloths, the women also wear waist-cloths, which they tie round like waist-bands. Above, they wear short jackets with short sleeves, at the waist they wear girdles of cowries threaded on rattan. On the neck they wear white and red *lakstaw* beads. Above the calf up to the knee they wear hoops of rattan, dyed black. On the head they wear turbans of coarse cotton cloth.

TAT-SIN—

A village situated on the left bank of the Salween river, lat. $21^{\circ} 46'$, long. $95^{\circ} 21'$

TAY-GOUNG—

A village on the route from Myin-gyan to Yamay-then, lat. $20^{\circ} 8'$, long. $96^{\circ} 9'$

TAZEE-YIN—

These two villages extend about 1,000 paces.

TA-ZOO—

A small village of about 20 houses on the road from Myin-gyan, 79 miles distant from the former place

The approach to it is across paddy-fields, and a little before reaching it a fine well of water 10 or 12 feet in diameter is passed

TETHONE—

A town on the route from Yamay-then to Thuen-nee

THABRA-DOUNG—

Hill east by north of Yamay-then.

THA-BOUNG—

A village one mile north of Pa-to, and consists of two clusters of huts, about 60 in number Population about 300

THA-BYAY-BIN—

A village on the left bank of the Irrawaddy and on the right bank of the Pinwa-choung, about $5\frac{1}{2}$ miles north of Yaynan-gyoung It contains about 1,000 inhabitants Within a mile or two north-west of this place is Zoung-gyan, a village of 60 huts Jaggery is manufactured in these villages

The stream is fordable near the town at a depth of 2 feet.—(*Native information, 1881*)

The buildings at Tha-byay-bin are reported by Captain Yule to be numerous, and had an air of great antiquity They are entirely of brick, and the vaults and walls were plastered.

The hills, which at a distance of two or three miles below Thayetmyo approach the river and form steep ridges along its banks, are, near the station, separated from it by a wide plain some miles in breadth. Winding round in a broken ridge to the west, they again form a higher, more marked, and broken range opposite to Meesaday

They are throughout composed of sandstones and shaly beds of the same general character as those forming the ridges to the south of Thayetmyo From this the wooded and irregular hills extend up to Zoung-gyan-doung

On the eastern bank the country is less elevated and undulating Narrow flats richly clothed with vegetation extend here and there between the river and the hills

THABYAY-DAN—

This fort is strongly condemned by writers in the *Rangoon Gazette* The first says it is commanded by the pagoda of Shway-jayet, which he would prefer for purposes of fortification

"A single mountain gun hoisted to the pagoda would make the fort untenable The faces are polygonal, unflanked, and without ditches. Cows can walk on the wall itself, which is rendered accessible by a gentle slope This is apparently confirmed by the ex-Engineer officer "There is no accessory defence in front of the main work," says the military correspondent, as is customary where a work is constructed without a ditch At this fort there is nothing, no platforms for cannon, and no traverses to protect them

from an enfilading fire which would quickly disable them. There are no magazines for projectiles near the guns, so that the artillerymen would have to pass to and fro from the main magazine exposed to fire. The fort might be ploughed up by projectiles, there being no parapets or parapet to protect the gunners from reverse fire, and no shelter for the gunners. The gate placed in the north side in sight of the river is defended by a traverse which is too short, it should have been on the east side. Its present position is bad and its trace ridiculous. The fort is a costly mass of brick destined to become a trap for shell in case of an attack, and a pit in which to drown the garrison in the rainy season. One day or other a rise in the Irrawaddy will infallibly carry it away."

The ex-Engineer officer adds that "the interior slope of the parapet is above 6 feet, and the soldiers from inside cannot see to fire on the enemy outside." Colonel Horace Browne makes the same remark about the height of the parapet, which would require 7-foot men to fire over them.

THAFRAU-BIN—

The first defile of the Irrawaddy commences here. Dr Anderson, who visited it in 1868, gives the following description: "This portion of the river commences a few miles above Bhamo, and extends for 25 miles nearly to Teenbo. Between these two points the river flows under high, wooded banks. At the lower entrance the channel is 1,000 yards wide, but gradually narrows to 500, 200, and even 70 yards, as the parallel ranges approach each other. As we ascended, the hills rose higher and closed in, rising abruptly from the stream and throwing out a succession of grand rocky headlands. We moored for the night off a Phwon village, standing on a cliff 80 feet high, just above the first so-called rapids. The next day after we had proceeded about 7 miles we came to a reach in which the river flowed sluggishly between two high conical hills, which seemed to present no outlet. The quiet motion and deep olive black hue of the water suggested great depth (Bayfield found no bottom at 25 fathoms). This reach extended for $1\frac{1}{2}$ miles, with a breadth of 250 yards, closing in at the upper end, when the channel is broken up by rocks jutting out boldly and approaching each other within 80 yards. A pagoda, apparently of great age, perched on a small isolated rock rising about 45 feet from the stream, seemed to indicate the limit of the rising of the water. This rocky reach stretches a mile in a north-north-west direction, and terminates abruptly in an elbow from which another clear reach overhung by precipitous but grassy hills extends east-north-east. This bend of the river is one of the most dangerous parts owing to the numerous insulated greenstone rocks which stretch across it, exposed 20 feet or more in February. Owing to the sudden bend, the current rushes between them with great violence. The body of water pouring through the narrow gorge must in the rains be enormous and of terrific power. The navigation with the present obstacles unremoved would be impossible for river steamers, but engineering skill could speedily render the waterway practicable, if desired, for traffic."

THAIMON—

A small village on the route from Lay-deah to Tacaw ferry. Water about half a mile distant.

THAMA-KAN—

A village on the route from Yemay-then to Lay-deah-myo, lat. $20^{\circ} 47'$, long. $96^{\circ} 43'$.

THAMAN—

A river joining Chin-dwin.

THAN-BA-YA-WA—

A village in the Katha district. In 1837 there were 30 houses.—(*Bagfield*)

THAN-DAW-ZEN—

The word signifies "receivers of the royal voice" They record the decrees of the Hlwot-daw as well as the Saray-daw gyees ("great royal writers"), and are writers attached to the royal household.

They convey orders from the king to the Hlwot-daw. When such a messenger enters the Hlwot-daw, all turn towards the throne, whilst the Than-daw-zen kneels before it, and all perform the 'shakho'.

THA-NGAY-DAW—

A village $2\frac{1}{2}$ miles north from Byoo-kan. It consists of about 50 huts. A cart road connects it with Byoo-kan. Population about 250. A road is said to lead from hence to the river.

Three miles north-east of this are three villages named Pay-kone, Tehdaw-ya, and Nagyaw-ya. These are situated in a line extending for $1\frac{1}{2}$ miles. Betel is much cultivated in these villages, and paddy is also grown to some extent.

THAYET-KONE—

A village on the left bank of the Irrawaddy, one mile north of Let-pan-chay-baw —(*Native information, 1881*)

THEKYO-GOUNG—

A village situated on the east bank of the Irrawaddy.

THEMBAW-ENG—

A village on the Irrawaddy south of Bhamo.

THEM-PA-LET—

A village of 8 or 10 houses, 56 miles from Myin-gyan on the road to Yemay-then. Surrounding country dry scrub jungle. Good water from a large deep well.

THENG-LENG—

A small creek which flows into the Irrawaddy.

THEN-GYOUNG—

A small village situated on the east bank of the Irrawaddy.

THIEN-NEE—

Shan town in Upper Burma. Was entirely destroyed in 1864.

THIEN-YWA—

A village $1\frac{1}{2}$ miles north from Gyoke-bin.

THI-GYAIN—

A town in the district of Bhamo. Is situated on the right bank of the Irrawaddy, opposite to the village of Myadong on the left.

THIN-GA-DAW—

A village on the west bank of the Irrawaddy in lat $28^{\circ} 45'$, long 95° . Coal is found near this place.

THIT-TOUK—

A village $1\frac{1}{2}$ miles east of Atet-hnyin. Indian-corn cultivated.

THIT-TOUK-YWA-MA—

A village one mile above Thit-touk village. Indian-corn cultivated.

THOO-GYEE—

The headman of a township or village. The word literally means "big man," or "chief man." He would be called officially "Ywa-thoe-gyee."

THOOM-MER-GYEE—

A village on the Myin-ryan-Yamay-then road, about 49½ miles from the former town. Water-supply good from three or four wells. The head-man of this place is a thoogyee.

THOUNG-BAN—

A village in the Ka-tha district. In 1837 there were 30 houses.—(*Bayfield*)

TIN-GYAY GYAT—

A large village of Toung-yos and Toung-thoes, lat 20° 50', long 96° 45'

TOO-IAY-MAE—

A village on the road from Banong to Mandalay. The country about is thickly inhabited.—(*Richardson*)

TOUNG—

A village in the Katha district. In 1837 there were 30 houses.—(*Bayfield*)

TOUNGA-MOUK-KHIAUN—

A river falling into Chin-dwin

TOUNG-DAN—

A stream flowing into Sittang or Pong-loung

TOUNG-DAN-GOO-SAKHAN—

Haltang place on the route from Toungoo to Nyn-ryan, situated on the bank of the Toung-dan stream, a tributary of the Sittang or Pong-loung

TOUNG-DWEN—

A considerable island on the Irrawaddy named after a village inland on the east bank, which gives its name to a small district. The island is covered with fine trees. Above this the river narrows to 1,200 or 1,300 yards, with high, wooded banks on each side, and so continues for two or three miles, when Malloon is reached

TOUNG-DWEN—

A village situated on the east bank of the Irrawaddy

TOUNG-DWEN-GYEE (TOUNG-GWEN)—

An inland town about 25 miles east of Magway. There is said to be a fort here called Oung zaya, similar to that of Koola-gone, and garrisoned by 800 men.—(*Native information*)

The country around Toung-dwen is said to be productive. It is watered by the Karen-choung and the Yen-choung, two of the largest tributaries of the Irrawaddy from this side, and large crops of rice and cotton are raised over its extensive valleys.

Villages are numerous in the plain around Toung-dwen (99 in number according to the Burmese account), and of these one is said to contain 700 houses, and four others from 300 to 450. Cart roads lead from this town to Patanagó, Magway, and Yaynan-gyoung.

It is the chief town of the district of the same name, which is separated from Yemav-then on the east by the watershed range of hills extending from north to south, which separates the Sittang valley and the Irrawaddy from near Pagan upwards.—(*MacNeill*)

TOUNG-GOUP—

A river joining the Chin-dwin

TOUNG-HLA—

A district. Beyond the little ridge is the Pan-lun vale, lat 20° 47', long 96° 46'

TOUNG-HLA—

A valley, is enclosed along the east side by a steep scarp and rocky face, consisting of beds of a fine grained reddish sandstone of no great hardness, though the bedding is well preserved. Overlying these is a thick bed of calcareous breccia, the fragments contained being often large. There was said to be much limestone also out to the eastward. At the base of this scarp near the village there is a calcareous or so-called "petrifying" spring, and the ground round about it consists of calcareous tufa deposited from the water. This tufa is worked and much used in the building of pagodas, &c.

TOUNG-HLA—

A small stream which flows to the north, but further down it winds to the right, and bending round runs southward down the main valley into the Nyoung-yway-eng

TOUNG-HMOO—

'The public executioner' He is generally attached to each principal court with a band of branded ruffians.

TOUNG-TAMAN—

A lake south of Amarapoora.

TOUNG-TATE—

A village in the Shan states on the route from Yemay-then to Thien-nee, situated on the top of the range that bounds the south of the La-sheo valley

TOUNG-THA—

A stockaded town on the Myin-gyan—Nyin gyan road. It is the headquarters of a magistrate. Great quantities of toddy palms grow about the town, from which the people make toddy, which they drink freely. The water-supply is bad —(*Boxall, 1882*)

It is 29 miles distant from Myin-gyan

TOW-CHAR-NEE—

A village in two groups, one on a slight elevation on the road from Yemay-then to Nyin gyan. There is much paddy cultivated about here, and plenty of cattle and carts. The surrounding country is an open plain. The headman is a thoogyee. The water-supply is good, and is procured from two wells, which have always water —(*Boxall, 1882*)

TUMAUN—

A village near Mout-zobo

TUM-MEE-GAN—

A small village $46\frac{1}{2}$ miles from Myin-gyan on the road to Yemay-then. Water-supply from two wells at the north entrance to the village, where also there is a good zayat

TUPPEN—

A village on the Chin-dwin

TURRAFAE—

A small stream on the road from Banong to Mandalay. This is the halting place between Ban-sato and Pan.—(*Richardson*)

U

UNGO-CHING RANGE OF HILLS—

Dr Brown thus describes this range: "The range of hills called by the Manipuris Ungo-ching, although it looked a low one, was found higher

than anticipated, as other three parallel ranges were found after the first ridge was reached. The highest part of the range of hills must have been at least 2,000 feet above the valley. The crossing of this range of hills was the most fatiguing part of the whole journey, as the road was very steep, narrow, and bad. The heat in April is very great, and water scarce. The jungle was quite open on this range, but it was apparently uninhabited near the point crossed, and no cultivation was anywhere seen. Teak trees were plentiful on the range. From the commencement of the ascent to the eastern crest of the hills is 7 or 8 miles. Here another and larger valley is seen covered in patches with forest, and towards the south an extensive tract of swampy and grass land with scattered clumps of trees, and closing the valley in that direction a low range of jungly hills."

Of the routes across* the Ungo-ching range, there are five between Monfoo and the May-lang, and three between the latter and the southern extremity of the Kambat division.

Of the five first all are practicable for light armed troops and coolies (laden), but none for laden cattle, except the most northern, which leads from Sam-jok to Manfoo (Malphoo on map), and a second from Khong-dong to Hueo-lao on the right bank of the Ning thee.

The total distance from Kong-dong to Hueo-lao is 40 miles, which may be made in four marches.

Of the three routes south of the Maglang, the first leads from Weetop across the Ungo-ching hills to the confluence of the Maglang and Ning-thee rivers. The second, by which the British officers in Manipur have always travelled, extends from Sara-woon-ting-kol (lat. 23° 57' 11", long. 94° 24') to Sanayachil ghât. The third from Khambat to the mouth of a small nala about 2 miles below Gendah †. By this latter route Alompra advanced in 1758 to the conquest of Manipur, and it is represented by the natives of the country as a good one.

The Ungo-ching hills wherever traversed by these routes may be crossed in three easy or two forced marches ‡.

W

WA-BO-CHYOUNG—

A village in the district of Chyong-doung —(*Bayfield*)

WAIN-LOO-LENG—

A village in the district of Eng-tau-gyee —(*Bayfield*)

WA-JAH—

A village of the Mirip tribe on the western bank of the Irrawaddy —(*Bayfield*)

WAL-LAH—

A village of the Tisan tribe of Singphos —(*Bayfield*)

WAM-MOO—

A village of the La-pae tribe of Singphos on the east of the Irrawaddy —(*Bayfield*)

WA-PHY-TOUNG—

A village in the district of Singoo and Kyouk-myung. There were 100 houses in 1887 —(*Bayfield*)

* Pemberton, *N. N. Frontier*, 57. | † Or Kendat.

‡ See *Gazetteer of Manipur*, 1883.

WARON-KOUN—

A village in the district of Man-loo —(*Bayfield*)

WAT-TEE—

The queen of Sitta, the founder and first king of Sampenago —(*Anderson*)

WA-WUNG—

A village of the La-pae tribe of Singphoos on the west of the Irrawaddy —(*Bayfield*)

WAY-LA—

A mountain 3,000 feet high A day's journey north of Sampenago —(*Anderson*)

WAY-LA-THA—

The son of queen Wattee

WAY-LON—

A village in the district of Man-kay —(*Bayfield*)

WE-GYEE—

A village in the district of Mo-ngyeng There were 10 houses in 1837 —(*Bayfield*)

WE-GYIH—

A village in the district of Singoo There were 100 houses in 1837 —(*Bayfield*)

WE-MA—

A village under the chief of the district of Nga

WEN-HMOO—

The governor of the palace gate.

WET-DO—

A village under the chief of the district of Nan lun —(*Bayfield*)

WE-THA-LI KOUN—

A village in Bhamo district —(*Bayfield*)

WET-MA-SOOT-MYO—

A village on the right bank of the Irrawaddy in the Magway district, lat 20° 12', long 95° 3' It contains about 40 houses of timber and bamboo

The headman is a thoo-gyee

Crops	Paddy, sesamum, tobacco, peas and beans, maize, and a little cotton
Supplies	A few fowls, rice paddy, peas and beans, oil, and ghee
Transport	Bullocks about 150 Carts about 30

WE-WA—

A village under the chief of the district of Nga.

WEY-THOO—

A village of the Mirip tribe on the western bank of the Irrawaddy —(*Bayfield*)

WI-GRAN—

A village of the Tisan tribe of Singphoos —(*Bayfield*)

WILI-OPE—

A village destroyed last year of the Tisan tribe of Singphoos —(*Bayfield*, 1837)

WIL-TI-TO—

A village of the Tisan tribe of Singphoos

WOO-BYA—

A village of the Tisan tribe of Singphoos

WOO-LO-BHOOM—

A village of the Mirip tribe on the western bank of the Irrawaddy —(*Bayfield*)

WOON-DOUK—

The woon-douk is a deputy of the woon-gyee. The word signifies "the prop of the bearer of the burden."

The woon-douks, although they sit in the council, do not deliberate or vote. Whatever business they transact is in the name of their superiors, but in this capacity they do a great deal.

The woon-douks have their assistants, called *saray-daw-gyee*, literally "great royal scribes."

WOO-NGAN—

A village of the La-pae tribe of Singphos on the east of the Irrawaddy —(*Bayfield*)

WOON-GYEE—

A member of the chief council of the king of Burma. The word signifies, according to Crawford, "the bearer of the great burden."

The woon-gyees do not appear to have any distribution of departments of business among them, but deliberate together at the Hlwo-t-daw on whatever is brought before the body. In the absence of a member from the meeting, orders intended for issue appear to be circulated for approval, as in certain other governments.

The woon-gyees are generally designated either by the title of some office which they have held, or by a sort of peerage title derived from the township or district which they eat or hold in jaghir. Men gyee, or 'great prince,' seems to be their appropriate title of address, but their formal designation in Burmanised Pali is "egga-maha-thuna-padi." This is a corruption from the Sanskrit *eka*, chief, *maha*, great, *senapati*, general.

The woon-gyees are also styled *Pwen*, or outer thuna-padi, and household ministers *aween* or inner Thuna-padi —(*MacNeill*)

WOON KAK—

A village in the Momien district, which lies on the summit of the high ridge forming the western watershed of the Nam-poung, and must be at an altitude equal to that of Shi tee —(*Anderson*)

WOO SAW—

This place, three days' march north-west of Momien, is described as a town of 1,000 houses, surrounded by a stone wall 20 feet high and defended on one side by a deep stream, and altogether stronger and more flourishing than Momien —(*Anderson*)

WOO-YAH—

A village of the La-pae tribe of Singphos on the east of the Irrawaddy —(*Bayfield*)

WUNNAN-KHANG—

A village of the Mirip tribe on the western bank of the Irrawaddy —(*Bayfield*)

WURRA-BONE—

A small Kachin village, situated near the summit of a mountain —(*Anderson*)

Y**YA HOUNG KON—**

A village in the district of Hen tha-man. There were 10 houses in 1837 —(*Bayfield*)

YAJINNA—

A village situated behind the Moung gway

YA-KINE—

A large village on the route from Banong (in Karennie) to Mandalay (*via* Mokmay and Monay) —(*Richardson*)

YAN-DA-BO—

A village on the left bank of the Irrawaddy It is a poor one and not populous It is about 10 miles north of Myin gyan

It is chiefly remarkable as being the place where the British army turned back in 1821 after concluding a peace with the king of Burma, which took its name from the place

Earthen pots are made here in great numbers, and huge piles of them mark the situation of the village

YANG-KHUNG—

A village of the Moran tribe of Singphos There were 30 houses in 1837 —(*Bayfield*)

YA-THA YA—

A village situated on the right bank of the Irrawaddy, in lat 22° 57', and consists of about 20 houses inhabited by bamboo-cutters There is no cultivation, nor indeed any ground suited for it, except here and there a patch for vegetables —(*Bayfield*)

YA-WAR DHE—

A village on the road from Myin gyan to Yemav-then the approach from the north west is across paddy fields There are plenty of cattle here —(*B. Hall, 1852*)

YAY-BOUK—

A village in the district of Ka-tha There were 20 houses in 1837 —(*Bayfield*)

YAY-DAW—

A village in the Singoo district There were 45 houses in 1837 —(*Bayfield*)

YAY-DWIN GONE—

A village on the left bank of the Irrawaddy, 1½ miles north-east of Nyoung-oo There is a road between the two places

YAY-GA (BITTER WATERS)—

A large village To the west and north west of Yay-ga the surface is broken and ridgy, composed of successive layers of sandstone looking gneissose and earthy beds, greatly contorted and folded, and with thin seams of hornblende rock intercalated, which often present appearances of having been intruded as dykes The twisting of the beds is often very sharp and sudden, as many as two or three folds occurring in the space of 20 feet West of these the rocks become more sandy, and in thicker and more massive beds The whole has a crystalline or pseudo-crystalline character, the beds are semi-granular, semi-granitoid, and not much indurated, the more clayey beds slightly micaceous, and foliated There is no limestone with these rocks, but the cracks and fissures in them are filled up with carbonate of lime, and strewed over the surface are many fragments of the limestone of the other ridge —(*Yule*)

YAY-GYEE—

A village in the district of Hen-tha-man There were 10 houses in 1837 —(*Bayfield*)

YAY-KHWAY—

A village in the district of Man-lway

In the dry weather there is a good road between this town and Myin-gyan, but it is not passable during the rains —(*Native information, 1881*)

YAY-NAN-GYOUNG—

"('Fetid water rivulet,' from the petroleum which is so called by the Burmans) The aspect of this place is striking from the numerous pagodas and many roofed sacred buildings which crown the eminences, in the hollows between which the houses of the town are scattered" Immediately below these eminences is the river from which the town is named, dry at present as regards internal supply, but filled to some distance from the Irrawaddy and serving as a boat harbour

The town proclaims the nature of its staple to nose and eyes. The coal-tarry odour of petroleum is smelt everywhere

On the land side the town is commanded by heights Looking from these as far as the eye could reach inland the country appeared barren, the soil sandy and stony, with very scanty herbage, scarcely enough to redeem the surface from the title of absolute desert, with occasional scraggy bushes or gummiferous trees. Trees with substantial foliage were only seen in the bottoms, but even there no water was visible, or anything to indicate the season of the monsoon Fossil wood abounds everywhere

To reach the wells, which are situated three miles from the town, a road is followed leading among ravines and up the steep sides of rotten sandstone hills Here on an irregular plateau with a gently rising surface the principal wells are situated The wells are frequent along its upper surface and on the sides and spurs of the ravines which bound it on the north and south-east They are said to be about a hundred in number, and of these some are exhausted and not worked The depth of the wells appeared to vary in tolerable proportion with the height of the well mouth above the river level, but an inspection of the lowest situated near the bottom of the ravines enabled us to ascertain that all were situated considerably below the level of the ravine bottoms that bounded the plateau Those measured on the top of the plateau were 180 feet, 190 feet, and 270 feet in depth to the oil, and one was said to be 306 feet"—(Yule)

The area, within which these wells stand, does not appear to exceed half a square mile, in some places, the wells are less than 100 feet apart. The oil appears to be found in a stratum of impure lignite, with a good deal of sulphur—(Yule) *

The distance between this town and Wetma-soot on the Irrawaddy is nearly 10 miles, and the road, though hilly, appears practicable All the hills are said to be accessible by artillery This road can only be used in the dry weather

The following are the villages on the road —

	Miles.	Houses.	Inhabitants.
1.—Sat-ta-bway	1		
2.—Nyoung hla	1½		
3.—Sadaung kan	1½		
4.—Yone-suk	2	40	
5.—Beh mek	1½		
6.—Tha-pan mek	1		
7.—Kyeo zoo	1½		
8.—Wet ma-soot	2		

Yay-nan-gyoung is the residence of a woon

* The income of the king from this source is Rs 1,400 a day the quantity of oil obtained being 7,000 viss With better management, there is no reason why the income should not be greater

A sufficient number of cows, goats, fowls, and pigs are to be had here, and in most of the surrounding villages fish, pumpkins, peas and beans, oil and ghee

A large number of boats are always here, and earthen pots for oil are manufactured in large quantities

Camping ground There is said to be good camping ground in the vicinity of the town — (*Native information, 1881*)

The British force reached this place on the 31st January 1826, after having defeated the Burmese army at Malloon

History They found it miserable beyond description in appearance, presenting scarcely a blade of grass or vegetation of any kind, and the cattle consequently in a state of starvation Here the British commander received an embassy from the king of Ava

The country for some distance north of Yay nan gyounng presents much the same appearance, with bold sandstone cliffs out up by ravines, occasionally a stream with a snug village at its mouth, and farther inland a rolling table country, with here and there a prominent point spotted with trees and bushes, which are thicker and greener in the hollows About a mile distant from this, north, is the village of Pounga daw of 45 small huts

Transport Bullocks about 300 Carts over 80

Crops Cotton, sesamum, peas, maize, and tobacco

Along the river banks the lower portion of the cliff is composed of regularly laminated sands and clayey sands so little indurated as scarcely to deserve the name of sand-

Geological formation stones Many of the beds are slightly calcareous, and abound in calcareo-concretionary masses of the most varied shapes and forms The general bedding of the mass is quite regular, but each layer or bed abounds in oblique lamination and often of a most complicated kind A few pebbly seams occur, and occasionally a thin layer of ferruginous sand, cemented into a plate of ferruginous gravel or a thin layer of the peroxide of iron The whole series dips with considerable regularity to the south-west at angles of 25° to 30° Numerous deep ravines cut through these soft beds, and the fallen masses on either side assume the most fantastic outlines Some look like the lofty turrets of some great fortress, others are scarped into successive ledges or terraces, and all are devoid of anything like verdure

Over all these beds, but not continuously, is a layer of red gravel abounding in white quartz pebbles, generally loosely aggregated and incoherent, but occasionally cemented into a hard and very dense ferruginous conglomerate This conglomerate occurs irregularly in layers and patches in the mass and often projects from the face of the cliff a foot or more

The position of this gravel, which does not occur continuously on all the summits, is easily traceable from the marked difference in colour between it and the sandy beds below The latter are of a greyish-white, the gravel of a deep ochre or rust-red

In this gravel Mr Oldham found the broken femur of an elephant and some fragments of tortoise bones Numerous masses of silicified wood occur in it also, but the great masses which are numerous occur in the beds below Many of these are of great size, one was three feet four inches in diameter and more than four feet six inches long It had become highly charged with iron The upper portion of the country here, where out of the

immediate influence of the watercourses, is more level and less cut up, forming a general flat about 160 feet above the August level of the river — (*Oldham and Yule*)

The earth oil wells are all within a circuit of a few miles of Yay-nan-gyoung and lie principally in two groups, the most productive and valuable being near the village of Fwon gonng. Some are along the slopes of the deep watercourses, others on the flat at top. One of these watercourses which extends from the wells to the Irrawaddy gives a tolerable section of the rocks of the district, although the frequent falling in of the soft beds here and there breaks up the continuity. The series consists of one succession of beds of sand and clay seldom indurated into sandstone as a mass, although with frequent intercalation of nodular beds, or irregularly arranged layers of large concretions which form interrupted beds.

In the immediate vicinity of the wells these beds are nearly horizontal, and are as a whole clayey with sandy layers. These clays are of a bluish grey colour, flaky, and with very small and imperfect carbonaceous markings. In general the lamination is very thin, and is shown by successive alternations of clay and sand, frequently so thin and so numerous that from 50 to 80 occur in the thickness of an inch.

Where the sand predominates this is not the case, then the layers become thicker and more marked. In places these shaly beds are of a darker tint, and even blackish.

Imbedded in these are many small irregular patches of coaly matter. Portions of this are a true jet coal with brilliant lustre, other parts are powdery and friable, like charcoal. Every intermediate state may be seen. In conjunction with these little seams and patches of coaly matter, there is invariably a thick inflorescence of sulphur, giving a strong and well marked colour to all about it. Traces of this may be seen in many other parts also, where not in connection with the small patches of coal, but this development of sulphur usually occurs in connection with the appearance of coal. Leaves of sulphate of lime (selenite) occur in the shales or sandy layers along with this sulphur, both in regular seamy layers, and in their veins ramifying through the mass and filling up every little crack and crevice.

Near the surface sulphate of lime is formed abundantly on the face of the rocks, and produces most beautiful groups of silky acicular crystals — (*Yule*)

YAY NAN-GYOUNG to PAGAN—

Leaving Yay-nan-gyoung the left bank of the river continues a succession of ravine intersected cliffs of sand and sandstones, like those to the south. About two and a half miles north, after passing the small villages of Pougado and of Theng-younng, the large town of Peen-kyoung is passed, situated at the mouth of a stream of considerable length.

Passing this the general aspect of the country changes considerably. The steep bluffs of sandstone are lost, and there is a great stretch of long swelling country, more richly cultivated, and more covered with wood, though still by no means thickly or luxuriantly. As far as the eye can reach, fences and cultivation can be traced, and along the river bank villages are more numerous, and apparently more comfortable.

About a mile from this some low cliffs of loose sands and gravels (never more than forty feet high) are exposed. The layers are horizontal and

irregularly developed. A few small patches of ferruginous conglomerate gravel occur, but as a whole these deposits are not ferruginous, and are but loosely coherent. In many places along here fine trees clothe the bank. Occasionally undulating dry swells of the ground (as at Shen-byen-ma-gyo, with its picturesque group of ruins) based on loose gravel intervene.

The same general character of country continues to beyond Silay-myo, with great flats of river alluvium here and there. Above Silay-myo on the west bank is the flourishing village of Zeik-phyo. Here a small range of hills stretches away north and west for some miles. Opposite to this, small cliffs (10 to 20 feet) of reddish gravelly clay occur along the river bank, and form the termination of a low swelling country composed of undulating and rolling plains, stretching away for miles to the eastward, and gradually rising in that direction. Passing Peema-kyong this plain country is replaced by a succession of ridgy hills, of no great elevation, but forming a peculiar serrated outline from the successive outcropping of the harder beds among the softer sands and clays. The beds dip to south and west at angles of 12° to 15° , and give a succession of long and sloping ridges with steep and sudden falls.

All are bare, or very sparsely wooded, a few stunted shrubs being the only vegetation scattered over them, excepting the euphorbia, which luxuriates in the aridity which destroys everything else. This southerly dip continues for a couple of miles (about a mile and a half beyond Sengoon), then the rocks suddenly become horizontal for a little way, and then dip in the opposite direction at high angles (40° to 60°) averaging 45° to the north-east. This continues to the point of Sengoon, where a broad riverbed marks the entrance of a torrent. The rocks here are composed of blue clays and sands, with occasional hard and calcareous layers with fossils.

Above Sengoon the country immediately adjoining the river is low and flat, the country behind being formed of undulating plains, rising gradually as they recede from the river and tolerably well clothed with timber, the small and stunted size of which, however, indicates the arid nature of the soil. Large groves of palmyra trees occur along here, generally in the vicinity of the villages. From this, and stretching away towards Pagan past the village of Thikvo-gounz, there are many low chuis and islands in the river, until the southern termination of the Tan gye range, which faces Pagan, appears — (*Oldham and Lule*, 319)

YAY-NA-THA—

A village in the Singoo district. There were 150 houses in 1837 — (*Bayfield*)

YAY-THIT—

A village on the road from Myin-gyan to Nyin-gyan, 7 miles from the former place. The road lies over an open plain and is bad and muddy.

Yay-thit is a large village. Water-supply from three wells.

YAY-ZEE—

A village on the road from Myin-gyan to Nyin-gyan, about 2 miles from the former place. The surrounding country is well cultivated.

YEA-NGAN—

A small stream between the village of Myne and Yea-ngan — (*Richardson*)

YEA-NGAN—

This is a large village on the route from Bannong (in Karennee) to Mandalay (via Mokmay and Monay). There were about 200 houses, and the last in the Shan states. — (*Richardson*, 1835)

YEMAY-THEN—

A large town 94½ miles south-east of Myin-gyan. It is the chief town in the district of the same name

The town is divided into two parts by two dirty looking tanks.

There is much traffic in produce with the surrounding country. And there is a bazaar held every day. Plenty of carts can be hired here.

The approaches to the town are quite easy. There is a good sized tank at the north-west side, over which is a foot bridge.

A road runs due north to Hlne-det — (*Boxall, 1882*)

"Five miles east of the town is a high hill on which is situated the Shway-hmin-tin pagoda. A fine view is here obtained of the surrounding country. As far as the eye can reach, north and south appears one enormous plain extensively cultivated. To the westward at a distance of 30 or 40 miles is seen a low range of hills beyond which flows the Irrawaddy. To the east lies a range of hills that preserve a tolerable uniform direction of north and south, from lat 18° to lat 22°. The highest point of the range visible from here does not appear more than 2,000 feet."

"The old ditch is clearly traced round the town and in some places is full of water. The houses in this town are of a very inferior description, and not to be compared with those at Nyin-gyan, but the phoongyee's houses and zayats outside are very numerous and well built. There are also some handsome bridges across the ditch of the old fort. There are many large masonry tanks containing excellent water in the vicinity of the chief phoongyee houses. The town itself is about the same size as Nyin-gyan (1 mile square), but in the immediate neighbourhood are several large villages. To the south of the town lies a large tank called Cher-nee-gan. It is about 2½ miles long and 1½ miles broad. At all seasons of the year it is covered with waterfowl. I have never seen snipe so numerous as they were along the sides of this lake" — (*Watson, 1864-65*)

YEN DOR-MYO—

A large town, with plenty of pagodas, on the road from Myin-gyan to Yemay-then, 74 miles from the former. The approach from the north is across paddy fields, which extend a couple of miles on either side of the road. First outside the town on this side is a bad piece of swamp, about 200 yards wide and 1½ miles long. Beyond this are some phoongyee kyoungs.

Mr. Boxall saw a large flock of goats here (1882)

YETHIA—

A village, situated on the right bank of the Irrawaddy — (*Williams*)

YIEN-KAI—

A village under the chief of the district of Nga — (*Bayfield*)

YIN NEL-YIN-NET AND YIN-BAN—

There are three tribes near Hentone speaking different languages. They are in appearance like Tounghoos. The peculiarity in the women's dress consists of broad bands of wire fastened tightly round their waists over their clothes. The race is said to be very numerous — (*Pedden*)

YO—

Buchanan gives the following account of the Yo country, as related to him by an inhabitant. The Yo river enters the Irrawaddy below this (Pagan), and runs north between Tangyee and the Ksaya hills for a considerable way. It then turns west, rising from the Aikan mountains. The lower part of the small river has both its banks inhabited by Burmans, and there are two clusters of 9 villages each. Beyond these villages, but on the side of

the Kiayn hills, is Laungabee, a Yo city 10 leagues from Tangyee, Dandagye or Tayngyee, for it is pronounced in all these ways

Eight leagues to the north of Laungabee is Zo, 8 leagues further Yo, otherwise called Kaknap, 4 leagues beyond this is Telaiyn. Between these two, the Yowa Chyung turns to the west above there are Kalay and Thaungdut, two Shan cities. The Kiayn (Khyen or Nagas) inhabit all the hills beyond the Yo

Dr Buchanan was informed that Zo, Yo and Telaiyn were "Eramyo-gyee,"—very large governments, under the authority of sawbwas. Laungabee was governed by a myo-thoo-gyee, said to be agent for a mother of the prince of Pagan. Captain Yule, writing in 1855, confessed that nothing more was known of these people and their country than had been recorded by Buchanan

YO, or YAW—

Country lying along the river of that name, between the barren Tan-gyee hills that line the Irrawaddy opposite Pagan and the base of the Arakan Yoma diong—(*Yale*)

YO-BANG—

A village of the Moran tribe of Singphos. There were 10 houses in 1837—(*Bayfield*)

YO-HYEN—

A tribe of Singphos—(*Bayfield*)

YONZIN—

A village on the road from Myin-gyan to Nyin-gyan, 34½ miles from the former place

YOONG-SOOM—

A small stream of water through very heavy and extremely wet jungle, it joins the large stream called Yoong-moi

YOUNG-BENG—

A village in the Singoo district. There were 20 houses in 1837—(*Bayfield*)

YUNCHAN—

Is a large city to the east of Momien. It is described as larger and much more populous than Momien. The trade is also brisker, gold and silver, lead, silk, and salt are exported. It is described as having a brick wall round it, instead of a stone one, and, like Momien, many traders resort there from all parts of the province, and on account of the city having been spared by the Panthays, trade is carried on with greater energy than at Momien

The roads from all the places before mentioned, excepting Yunchan, converge at Momien, and it is from these great centres, Momien, Yunchan, and Yunnan, that muleloads to the number of ten thousand are despatched every year to Mandalay alone. There are two good roads from Momien to Yunchan, one direct to the east, the other through Kito, in a more northerly direction. Yunchan lies east of the direct route Talifoo, and is described as from seven to eight days' march from Momien. The road *via* Kito to Yunchan meets the direct road at a small town called Poopoy, and from what we would learn is the direct route to Talifoo. There is another road from Yunchan direct to Mandalay, *via* Thee-baw and Thien-nee. This road joins the direct route from Momien at the village of Looline, some four days' march from Momien and four days from Yunchan—(*Anderson*)

Here are the head-quarters of the great Company that has had for so many years in its hands the whole trade with Burma. Bishop Chevreau mentions

in one of his letters from Yunnan, that the chief manager of his association is at the head of 30,000 men — (*Williams*)

At the end of 1871 this town was taken by the Chinese — (*Anderson*)
YUNNAN—

The province of Yunnan, with its ten millions of population and twenty-one cities of the first order, is now well known to be, in a commercial point of view, one of the most important provinces of China. In the extreme south are copper, and perhaps zinc, and certainly the finest tea in the Chinese empire. The middle and northern portions are still richer, the minerals alone including gold, silver, copper, iron, mercury, arsenic, lead and coal. Silk, tea, rhubarb, musk, hams, honey, and many articles suited rather for the Burmese than European market, are also produced, and were formerly exported from this portion of the province. The centre of trade in Western Yunnan is Yung-chan, where are the head-quarters of the great Company that has had for so many years in its hands the whole trade with Burma. All the abovementioned articles are there traded in Tali and Yunnan are still more considerable places of trade.

Yunnan city is said to be much larger than Taifoo. It is situated in a south-east direction from Taifoo, distant fourteen days' march, and nearly direct east from Momi and Yung-chan. This city had been besieged by the Panthays for some time, and was the last stronghold of the Tartar Chinese in the province and their capital. Its fall was announced when we were at Momi, as mentioned before, and great rejoicings were held by the Panthays. It was told us that upon the reduction of the place, the king took up his royal residence within the city — (*Anderson*)

Climate and this particular spot has for several centuries attained such a bad character as to be regarded as impassable during the hot season. The reason assigned by Chinese writers is the retention by its precipitous banks of the pestilential gases brought down by the river. The authorities at Yunnan-foo described these gases as being visible to the naked eye, and invariably of a green, blue and red colour, and of causing the traveller to bleed profusely from the eyes, nose, mouth and ears. So great was the apprehension, that the officer commanding the escort started from his lodgings before daylight in order to cross the river before the sun rose — (*Baber*)

The badness of the climate was the constant complaint of the officials at Yunnan-foo, and so notorious is the province in this respect amongst the Chinese, that for many centuries their legislators have decreed that grievous criminals from other parts of the empire should be transported hither for servitude in the pestilential districts.

"Having had reason for some years past to believe that the Chinese system of transportation and penal servitude was for the most part existing in name only, I enquired many times of the officials of Yunnan-foo where the pestilential regions, we had heard so much of, were situated, when the reply invariably was that they all lay along the route between Yunnan-foo and Bhamo, and that we must most indubitably pass through them. Not only did we neither see nor hear of any convicts on this route, but the people spoken to seemed never to have heard that any such system was in practice. I need scarcely mention that the pestilential districts proper are for the most part situated in the escarped valleys lying at a low level, through which run the great rivers, where, owing to the configuration of

the land, the wind is for the most part excluded, whereby the air, loaded with miasma, remains stagnant. Not only in these low lands however, but on the higher ground, people were here and there fever ridden, which is not surprising, seeing that fever has been found rampant at far higher levels in the narrow valleys of the Andes."

"Again, owing to the non-cultivation for so many years, the neglected irrigation works have gradually turned both the sides of the hills and the bottom lands into swamps, marshes, or bogs, according to the surroundings. Every departmental city passed by the Mission had at least one large marsh in its vicinity, with the exception of Tali-foo, which, having been recovered so recently from the Mahomedans, has not yet had time to grow one. Again, the fearful massacres within the large cities, like the slaughter houses in South America, have so saturated the soil as to turn previously healthy cities into the seats of endemic diseases."

"On the other hand, with these exceptions, the great bulk of the province, being exposed to an almost constant breeze, frequently rising into a gale (called by the fearful, superstitious, natives "lang-tzu"), sweeping away the exhalations of the soil, is exceedingly salubrious, and we particularly noticed the healthy appearance of the people in this province, as compared with the yellow faces, sunken eyes, and general fever-ridden appearance of the natives along the banks of the Yang-tzu, in Szechuen. Moreover, there was a marked improvement in the appearance of our Chinese servants after a few days of the land journey. Likewise we saw several people amongst the hills from eighty to ninety years of age"—(Baber)

When the country has been brought back to a proper state of cultivation, the miasma will probably disappear, as has so often been shown in the history of the Mediterranean shores, where, whenever irruptions of barbarians or Turks put a stop to tillage, malaria gained the upper hand, and was never extirpated unless the country was again cultivated.

The Chinese in this province do not possess any efficient specific for ague or marsh fever, neither do they surround their houses with willow trees as a preventative.

The late French Me-king expedition either saw themselves or received trustworthy information of gold at Talon, in the sub-department of Yuen-liang, copper at Sin-long-chang, in the same department, salt at two places near Esmok, in the department of P'u erk, iron at Kang-hwa, in the sub-department of Yuen kiung-chow, in great abundance, as also between the district cities of Shiping and Fung-lui, in the department of Lun gan-foo, while the argentiferous lead ore in the same department has long been famous throughout China. According to Chinese statistical works, gold, silver, lead, iron, tin, zinc, and copper are to be found in several places in the province, while jade and amber are to be met with at the north of Momen, and many kinds of precious stones, including sapphires, lapis lazuli, turquoise, agates, &c., at the south. In short, a volume would be required to point out all the mineral wealth of this richly endowed province.

As regards vegetable wealth, the province is considerably larger than Great Britain, being estimated at 107,967

square miles, which, with the exception of a few lakes and precipitous mountain sides, are unquestionably fertile. The country presents to the unscientific eye a confused sea of mountains, some

with a trend from north to south, contiguous to others from east to west, having no tableland or anything approaching a plateau, nor any leading or main ranges. Between these mountains are valleys of every form and shape, the size depending generally on the elevation. At a high elevation the valley is narrow, lower down it becomes broader, being fringed with smaller ones, and is the seat of a valley or district city, while lower still, it, with others, converges into a small plain, containing a departmental city and sometimes a lake. At a still lower depth are the courses of the larger rivers, whose great volumes of water have worn, during the course of centuries, profound channels many hundreds of feet in depth through the yielding argillaceous sandstone chalk.

Of this vast surface not one-twentieth part is at present cultivated or put to any use whatsoever, for although not only the whole of the valleys, but a very fair proportion of the hill-sides, have been carefully terraced and supplied with water channels, yet only a small part of the petty ground has hitherto been broken up. The land under cultivation, moreover, is very small, even in proportion to the scanty inhabitants, compared with the north of China, and can only be accounted for by the greater difficulty experienced in keeping down weeds in such a fertile soil and mild climate, as well as the scarcity of manure. The latter for the most part consists of buffalo dung, which is plastered on to the sides of the cottages to dry, straw strewn in shady places on the high ways whereon to induce and receive the stale of passing animals, and boughs and green leaves of trees and shrubs which are ploughed into the land before the transplantation of the paddy.

"Opium is grown more or less in all but the extreme southern provinces, while outside the great wall it extends to the banks of the Amur, Yunnan, having produced the drug for nearly one hundred years, has had the benefit of accumulated experience in the manufacture, which is the only reason for its comparative superiority."

"Yunnan opium is largely imported into Shanghai, the touch being 50, while 75 is the touch of the best Malwa. The price is about 15 taels per hang, as against 13 taels to 14 taels in Yunnan-foo, thus showing that the price is not greatly enhanced by the long journey and changes of ownership. Although, as stated above, opium was growing all along our route from our first entry into Szechuen until we arrived at Momián, while in Yunnan province it was to be seen not only outside but inside the city walls, yet its importation and cultivation are alike strictly prohibited in the current editions of the Penal Code. In an edition published by the Chinese Government at Peking so lately as the year 1871, it is laid down that in cases where foreigners bring opium to China for the purpose of sale, the principal offenders shall be sentenced to immediate decapitation, and the accessories to immediate strangulation, the sentences to be carried out by the foreign headman, under the supervision of the Chinese local authority, who will receive his instructions to that effect from the governor general or governor, after the latter shall have satisfied himself, by examination, of the personal identity of the offenders."

"With regard to growers in the interior such evil disposed persons planting the poppy and manufacturing opium cake from its juice shall, if the quantity amount to 500 hang (about 80 lbs avoirdupois), be sentenced to strangulation, the carrying out of the sentence to be deferred, the accessories

to be sentenced to military servitude for life at extremely distant and pestilential frontiers, the landowners having a guilty knowledge to military servitude at distant frontiers, together with the confiscation of the misused land, while the neighbours and constables have to receive 100 blows each from the heavy bamboo for not reporting the offence to the authorities. Mandarins convicted of smoking are for ever deprived of their position in the service, and are banished to Tartary, while any eunuch smoking within the palace precincts is to be sentenced to wear the cangue (a wooden collar weighing by regulation 33½ lbs avoirdupois) for the rest of his natural life at the most distant and pestilential frontiers, under custody of the local officials, not being pardoned even when a general act of grace had been issued by the Emperor"—(Baber)

At present some unprepared silk is imported into Bhamo from Szechuen and Yunnan. The quantity is unimportant now, but in former years a large trade was done with Burma in yellow silk, which was the product of the province itself. Before the rebellion it was a well-known silk producing country, the department of Yunnan too being famous for its satin, while silk was likewise produced in the departments of Yung-chang-yuen, Kiang-lin-gan, Shunning, Lu-kiang and Kiang-tung.

The sheep, though essentially a mountaineer, and not to be compared with our Leicesters and Southdowns, is yet a larger and finer animal than the fat-tailed Mongolian variety common in Northern China and the seaboard. It has a light thin tail, its flesh is eatable, and the wool capable of making the strong Ku-sung cloth above referred to. Although not separated from the goats, and, as elsewhere, occasionally inter-breeding with them, yet the wool is not so hairy as in Northern China, and of course is capable of improvement.

Yunnan, though not probably at present holding 10,000, is capable of supporting at least 40,000,000 sheep. Its area, estimated at 107,969 square miles, is one fifth larger than Great Britain, it has a most suitable climate neither too hot in summer nor too cold in winter, while the hills and surface generally are covered with luxuriant grass, which, like the grass in some of the Western States of North America, is capable of affording, though dry and dead, due sustenance for animals throughout the winter. I mean of course uncultivated grass, hay being unknown in China, where the agriculturist has no instrument for cutting grass other than a sickle, the arc of which is about 8 inches in length. On this subject I speak with certainty, as the mules and ponies we used and met with on the road, as a rule, had no other food than the dry grass they ate after their day's journey was finished, although carrying heavy burdens up and down hill for many days consecutively. Moreover, the country is well supplied with water, while the hills having a dry porous soil, the sheep would probably not be liable to disease. During our journey through the province we saw three or four flocks numbering from forty to fifty head each, and also occasionally one or two stray sheep herding with a few goats."

"The cattle do not call for much remark, being few in number, small in size, and generally under-bred. An incipient fleshy or fatty hump more or less pronounced over the withers would seem to indicate a connection with the Indian variety. The udders of the cows are small and comparatively undeveloped, owing probably

to the fact that the Chinese make no use of cheese, butter, or milk. These cattle are used for ploughing the hillsides, or rather scraping them, the usual depth of the furrow slice in China being from three to four inches, they do not appear to be used as beasts of burden in this province. In short, they are little esteemed, their place in agriculture being ably supplied by the water-buffalo, which is to be found in large numbers, and having a constitution ignorant of miasma, he can plough the bottom lands with impunity. The buffalo likewise is not used here for transportation purposes."

"Formerly this province was celebrated for its excellent horses, very strong and vigorous, but as the Mission did not meet with any throughout the journey, it is probable that, like their owners, they ran away during the rebellion. The only animals we saw representing their species were wretched under bred brutes, unworthy of notice. As, however, when trade has been firmly established between this province and Burma, there will, viewing the nature of the present supply, be a large demand for China ponies in Lower Burma, and possibly in India. I think it will not be out of place to give a brief description of the animal, for which I am indebted to Mr. Low of this port (Shanghai) —

"China ponies average in height 13 hands 1 inch, say from 12 hands 2 inches to 13 hands 3 inches, and very seldom is one of 14 hands seen."

"Their measurements in girth, forearm, and thigh are as great as most of 13 hands 3 inch horses. Colours vary as much as horses. All the shades of dun, from mouse colour to yellow and grey dun, all having the stripe down the back, and the zebra marks on the knees more or less distinct,—greys, chestnuts, browns, blacks, roans. The weights under which they run here are 9 stone 12 lbs for 12 hands, and 3 lbs each inch additional, and with these weights the best time on record is—

	Minutes	Seconds
For $\frac{1}{4}$ mile	0	57 $\frac{1}{2}$
" $\frac{1}{2}$ "	1	30 $\frac{1}{2}$
" 1 "	2	5 $\frac{1}{2}$
" 1 $\frac{1}{4}$ miles	2	38
" 1 $\frac{1}{2}$ "	3	12
" 1 $\frac{3}{4}$ "	3	57 $\frac{1}{2}$
" 2 "	4	28
" 2 $\frac{1}{4}$ "	5	43

"Several ponies have jumped over water measured 18 feet 7 inches, carrying from 12 stone 7 lbs up to 13 stone 7 lbs."

"The road from Yunnan-foo to Mowmen was formerly laid down with small flat blocks of stone (not cobble stones), and though at present considerably out of repair, is of sufficient breadth to be passable for elephants, and at any rate in the winter months practicable for the transportation of goods even with nothing better than the present undersized mules and ponies, as is proved by the fact that Burmese cotton is laid down at Yunnan-foo at the low rate of 20 taels per picul, being very little higher than the average price at Chung king. So soon as the province has recovered itself, the road will doubtless be put in better order, but I am of opinion that no improvement in the way of easier gradients can be made without an enormous expenditure of time and money. Chinese and Shans are quite competent to discover in the course of centuries the easiest route from one town to another, and although the traveller may feel disgusted to find the road incessantly climbing the steepest visible hills, yet

if he attempt to go round the bases or make a short cut of any kind or shape, he will speedily be brought to a standstill by the precipitous walls of a ravine or other insurmountable obstacle."

"With regard to the present trade, Captain Cooke, who has made a study of the question, states that about 25,000 bales of cotton, amounting at Rs 50 per bale to the value of Rs 12,50,000, are sent yearly from Burma to Yunnan, together with a considerable quantity of British salt (Bhamo consumes from 500 to 600 tons yearly), piece-goods, &c, taking in exchange Yunnan, Shan, and Kachin opium, 3,578 mannds of opiment (the Bhamo mandard is the equivalent of 80 lbs avoirdupois), iron and copper made into cooking pans in order to escape the tax on the raw material, and sundries, such as dried fruits, chest-nuts, &c. Captain Cooke computes the total value of the present trade, including both roads, to amount at a liberal estimate to £250,000 yearly. This sum is simply ridiculous when we consider that, on the one part, there is the vast mineral wealth of Yunnan, and on the other, in addition to steam communication with India and Europe, the great valley of the Irrawaddy, equal in inherent powers of production to the valleys of the Nile or Euphrates, and which from its incomparable irrigation capabilities would, if inhabited and cultivated, be probably the most productive valley in the world.

"Seeing that Yunnan has two crops of beans a year, a prodigious supply of upwards of one hundred different kinds of medicines and fungus of a superior quality, as also the most delicate tea in the empire growing over a very extensive range of mountains, opium, tung oil, white insect wax, formerly exported largely to other provinces, vegetable, tallow, silk, and tobacco, in addition to its enormous mineral wealth, while its roads, though steep and toilsome, are not, as in parts of the plains in China, often impassable or foundering during the summer rains, it would not be presumptuous to predict, were Bhamo situated on the seaboard, that the trade between Burma and Yunnan, under populated and misgoverned as that province is, would speedily equal that carried on in foreign bottoms (exclusive of the large native junk trade) in such small ports as Kinkiang, Chinkiang and Ningpo, viz, £3,000,000 sterling and upwards per annum in total value. Unfortunately the rates of freight on the Irrawaddy are excessively high, the trade is at present a monopoly in the hands of the most powerful persons in the two respective countries, while the British merchant would not be able to avail himself in Burma of the privilege of extra territoriality which he enjoys in China"—(*Davenport, October 19, 1876*)

YU-THEIYA—

A village, situated on the west bank of the Irrawaddy

YWA DAI MIK—

A village $\frac{1}{2}$ of a mile from Myn-gyoon, and contains about 1,000 inhabitants

YWA-THA-YA—

A village on the Myin-gyan Ava road, about $3\frac{1}{2}$ miles from Na-beh-gwa, and about 1 mile from the Irrawaddy. It contains about 1,500 inhabitants.

Headman

The chief man is Thwa-touk-gyee, who exercises the functions of a police officer

There is an unusually large supply of cattle here. There are two clusters of monasteries here. The space occupied by one,

Cattle

which is nearer to the road, is extensive and suitable for encampment. Near this is a tank which supplies drinking-water at all seasons of the year

Buildings

Jaggery is manufactured in this village, best palm leaves, used for writing on, are obtained in this place

A mile hence is Koke-keh, a village of 800 inhabitants — (*Native information*)

Cultivation. Cotton, maize, peas, beans, rice, jaggery, and sesamum are cultivated

Transport. Bullocks about 100 Buffaloes about 50 Carts about 50

Supplies A small quantity of rice is all that could be depended on

Streets The streets of the village are crooked and narrow
There are no open spaces inside The village is surrounded with a thorn hedge

Houses Houses are of timber, bamboo, and mats of palm leaves

The north, south and east sides are covered with jungle On the west is an open space large enough for about 2,000 people to encamp

The road along which the telegraph wire goes is about 100 feet wide with jungle on both sides From Ywa-tha-ya eastward the road is good up to Myo-tha-myo The road that goes through the forest up and down hill is bad

A road leads north from the village to Myaw-gyee-ywa on the Irrawaddy about a mile distant

From Myaw-gyee there is a strand road up to Ava fort There are no hills on this road, and it is much frequented

East of Myo-tha-myo the road passes through jungles and over hills, and is bad up to Ava It is infested with thieves and robbers and other bad characters — (*Native explorer, 1879*)

YWA-THIT—

A village, situated about three-quarters of a mile to the north on the high bank of a small creek called Theng leng, which flows into the Irrawaddy between high alluvial banks — (*Anderson*)

YWA-THIT—

A village of 40 small houses about 3 miles north-east of Kone-ywa A fairly good road connects the two places

There are two large tanks near this village containing good drinking-water

YWA-THIT-GALAY—

A village in the Bhamo district — (*Bayfield*)

YWA-THIT-GYEE—

A village on the north bank of the Irrawaddy, nearly opposite to Kyouta-lone It contains 700 or 800 houses The village is traversed in all directions by hedged lanes, with gates at intervals Population about 3,500 or 4,000 There are several pagodas here

There is a road from this village to Sagaing, and it is here that troops should land in order to outflank the Sagaing works The road between the two places requires to be surveyed

YWA-ZEE—

A village 1½ miles north of Thuen-ywa

Z

ZA-BIN-GAN—

A village on the road from Yemay-then to Nym-gyan. It is partially surrounded by a bamboo stockade. The road leading to it from the north is bad.

ZAGA—

A lake south of Ava.

ZAGA—

A town near Salween.

ZAU-NIAN-TOUNG—

Hills near Malloon.

ZAYAT—

A rest-house.

ZEE-GYOON—

A village of 50 houses on an island on the Irrawaddy.

ZEE-GYOON—

A village in the Taloke-myo district about 1 mile from the bank of the Irrawaddy, 1½ miles from Sin-day-wa, and contains about 30 small huts. Population about 150.

Cultivation.

Cotton, paddy, maize, sesamum, peas, and beans.

Stock.

About 40 buffaloes and 100 pigs.

Transport.

About 200 bullock carts (doubtful).

Supplies.

Pork and beef, a few ducks and fowls, rice and

paddy.

The streets are 10 to 15 feet wide. No open spaces inside village. Houses of timber, bamboo, and palm leaves. The village is surrounded by a thorn hedge.

On the east of the village are some paddy-fields and also on the south.

On the north a plain with khyoungs large enough for 2,000 or 3,000 to encamp.—(*Native information*)

ZEE-PHYOO-GOUNG—

A village in the district of Ha-khan.

ZEI-ZHEN—

A river joining Chun-dwin.

ZEIP—

A ghat or stairs at the landing place of river.

ZERA-PURA—

Pali name of Sagaing.

ZETUWADY—

A town south of Pagan.

ZI-HYU-GOUN—

A village in the district of Mogoung.—(*Bayfield*)

ZOUNGA-LAW—

A lake at Amarapoora.

ZOUNG-GYAN-DOUNG VILLAGE—

A small village on the right bank of the Irrawaddy a short distance north of our frontier. It is situated a little below the large and richly wooded island of Loong-gyee. To the west is a chain of hills well wooded named here Let-mah-tee-doung. On the east the country is lower and undulating. Captain Yule was here in 1855. Near the village is a hill thinly wooded.

with castechu and other trees. From this they had a fine view of the Loong-gee island with its park-like foliage and the embracing arms of the river. Away from the river bank no villages were visible, but cart roads passed inland in various directions.

The ground round this village is undulating, and the bottoms only are cultivated. At the time of Captain Yule's visit the place had suffered much from want of rain, and no rice had been planted for some time past — (Yule) OUNG-GYAN-DOUNG to MALLOON—

Sharply marked ridges of sandstone stretch away from the river at Zoung-gyan-doung to the west. Some of these beds are calcareous and full of shells, but the majority are gritty sandstones, open grained and slightly indurated with alternating beds of a more clayey deposit generally of a bluish tint.

This ridge continues to hug the river bank till near Malloon, whence it recedes to the west, and a belt of champagne country intervenes between it and the river.

Thus far the channel of the river is well defined and not very wide (1,200 to 1,400 yards), with frequently steep and wooded banks.

END OF PART I
